

David J. Smithwick Jr. The Design and Implementation of a Web-Accessible Database to Integrate with the Existing Information System of Rainbow Soccer, Ltd. A Master's Paper for the M.S. in I.S. degree. April, 2004. 57 pages. Advisor: Evelyn Daniel

This project analyzes and redesigns part of the information system for Rainbow Soccer Ltd. in Chapel Hill, NC. The goal of the project is to optimize the information system in order to gather and disseminate information with greater accuracy and efficiency.

Rainbow Soccer's current system primarily consists of a static, informational website accessible to the public. There are two main problems with this system. First, there is not an efficient way for coaches to research field availability. Second, there is no complete, up-to-date master or individual team schedule accessible on the web.

The proposed system incorporates a web-accessible database. The database was built in Microsoft Access while the user interface was created using ColdFusion and HTML. This system would allow the Rainbow Soccer staff to publish up-to-date information more easily and would help facilitate information retrieval for its users.

Headings:

Computers -- Information Systems

Information Systems / Design -- Web Sites / Design

Information Systems / Administration -- Database Management Systems

Database Management Systems -- Microsoft Access (Computer Program)

THE DESIGN AND IMPLEMENTATION OF A WEB-ACCESSIBLE DATABASE
TO INTEGRATE WITH THE EXISTING INFORMATION SYSTEM OF RAINBOW
SOCCER, LTD.

by
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A Master's paper submitted to the faculty
of the School of Information and Library Science
of the University of North Carolina at Chapel Hill
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Approved by:

Evelyn Daniel

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Introduction

Project Purpose and Overview

This project analyzes and redesigns part of the information system for Rainbow Soccer Ltd. in Chapel Hill, NC. The goal of the project was to optimize the information system in order to gather and disseminate information with greater accuracy and efficiency. This paper discusses the current system and provides recommendations for an addition, a web-accessible database system. The details of the design and implementation of the new database system are examined. The future of Rainbow Soccer's system is also discussed.

Background on Rainbow Soccer Ltd.

“Rainbow Soccer offers recreational and competitive league soccer to children and adults living in Chapel Hill, North Carolina and the surrounding areas. It is the oldest soccer organization in the Chapel Hill area and recently became a member of the North Carolina Youth Soccer Organization (NCYSA).

Rainbow Soccer is a non-profit organization that survives on fees, sponsors and gifts from the general public. It is run by an administrative staff and overseen by a board of directors. The coaches and referees for the non-competitive leagues are volunteers, including many UNC-Chapel Hill students; the competitive leagues' coaches and referees are paid.

Each year there are spring and fall seasons for each league. Every season there are over 2000 players competing in Rainbow's ten different leagues. The players' ages range from 3 to adult.

Rainbow Soccer's main facilities, the 'Rainbow fields', are currently leased from UNC-Chapel Hill. Those fields are located just off US 15-501 in Chapel Hill. Because of the increasing need for field space, Rainbow Soccer is now also working with the Chapel Hill and Carrboro Parks and Recreation Departments to rent public fields" (<http://rainbowsoccer.org/index.html>).

Current Information System

Rainbow Soccer's current information system primarily consists of a website accessible to the public. The website can be found at the following URL: <http://www.rainbowsoccer.org>. There is a great deal of readable information concerning many aspects of the organization. Along the left side of the homepage is a list of links to pages within the site. Some of the topics covered in these pages include the following: contact information, history of the organization, FAQ's, game schedules, diagrams and maps of fields, information on the different soccer divisions, online registration form, soccer camp, coaching tips, team photos, links to related sites, etc.

The website and online registration system were created by Andrew Arnold with Mango Solutions. Mango Solutions is a web development company that specializes in online registration applications. Brad Hemminger, a current member of the Board of Directors, created the most recently added links to the site.

The other basic components of Rainbow Soccer's current information system include email, telephone, pencil, and paper. Information is often gathered and disseminated through use of email and telephone. Some changes in information are published to the web while others are recorded with pencil and paper.

Problems with Current System

There are two main problems with the current information system at Rainbow Soccer. First, there is no efficient way for coaches to research field availability. Coaches are responsible for scheduling practices, scrimmages, and make-up games. Thus, they need to know what dates, times, and fields are available as options. Currently, the method of finding such availability involves contacting the Rainbow staff and asking them what is available. This process takes a considerable amount of time and is error-prone. The staff has to scan a list of field reservations, including all games, practices, etc., to look for field availability.

The biggest dilemma with this approach is the field divisions. There are three different sizes of fields: adult fields, youth fields, and kid fields. Each adult field splits into two youth fields. Each youth field splits into three kid fields. Thus, each adult field splits into six kid fields. Therefore, when an adult field is being used, two youth fields and six kid fields are unavailable. The corollary is that when a kid field is being used, the surrounding youth field and adult field are also unavailable. The problem here is that nothing on a printed schedule of events points out that adult field one (AF1) and youth field seven (YF7) are unavailable when there is a game on kid field seven A (YF7a). The

experienced staff at Rainbow Soccer usually knows to schedule around such field conflicts, but mistakes are sometimes made and the process is time consuming.

The other big problem with the current information system at Rainbow Soccer is that there is no complete, up-to-date schedule accessible to the public (players, parents, etc.). The website has a season-long schedule of all games in pdf format (portable document format) which is published before each season begins.

Figure 1 - Complete Game Schedule: Spring, 2004

SATURDAY, Feb. 28 (Scrimmages)

(If team shirts have not arrived, teams on left wear light shirts, teams on right wear dark. No referees for these informal scrimmages.)

PEEPERS (3 & 4 YEAR OLDS)

9:00	Ducks - Bambinos	YF 7 Near
	Saturn - Leppfrogs	YF 7 Middle
	Monkeys - Twisters	YF 7 Far
10:15	Abacadabra - Popcorn	YF 8 Near
	Heffalumps - Chickadees	YF 7 Near
	Bingo - Peanuts	YF 7 Middle
	Crackerjacks - Bees	YF 7 Far

PIPPIN (K - 5&6)

9:00	Panda - Moonstones	YF 7-8 Near
	Stars - Gnomes	YF 7-8 Middle
	Blue Roosters - Fireflies	YF 7-8 Far
	Unicorns - Leprechauns	YF 8 Far
10:15	Sunrise - Booters	YF 7-8 Near
	Twilight - Dynamite	YF 7-8 Middle
	Puffins - Gecko	YF 7-8 Far

PREMIER CO-ED (1st-2nd)

9:00	Orcas - La Bamba	YF 10
10:15	Jazz - Meteorites	YF 8
10:15	Orion - Gryffindor	YF 10
11:30	Greyhounds - Corona Red	YF 7-8
12:45	Cheetahs - Kicks	YF 10
2:00	Good Times - Dragonflies	YF 10

PREMIER GIRLS (1st-2nd)

11:30	Penguins - Koalas	YF 7
11:30	Corona Red - Greyhounds	YF 7-8
11:30	Dolphins - Cahows	YF 8
11:30	Cool - Corona Blue	YF 10

PELE CO-ED (3rd-4th)

9:00	Pumas - Pegasus	YF 6
10:15	Moxie - Energy	YF 6

PELE GIRLS (3rd-4th)

9:00	Amigas - Deja Vu	YF 5
10:15	Unos - Macaws	YF 5

CLIPPER (5th-8th)

9:30	Prism - WaveRunners	YF 4
10:45	SurfRunners - Wizards	YF 4

SUNBOW (3rd-4th)

12:45	Ajax - Seekers	YF 6
2:00	Celtic - Santos	YF 6
3:15	ADP - Spurs	YF 6

SUNBOW GIRLS (3rd-4th)

11:30	Supersonics - Express	YF 5
2:00	Sundance - Everton	YF 5
3:15	Artemis - Columbia	YF 5

SUNBOW (5th-8th)

10:45	Shamrocks - Mustangs	YF 3
12:00	Thunderbirds - Lasers	YF 3

YF6 Far	YF6 Near
YF5 Far	YF5 Near
YF4 Far	YF4 Near
YF3 Far	YF3 Near
YF2 Far	YF2 Near
YF1 Far	YF1 Near

Cleland Road

YF7 Far	YF7 Near
YF7-8 Far	YF7-8 Near
YF8 Far	YF8 Near

Rainbow Road

Ilton Road

Rainbow

Soccer

Rules:

1. Never climb on soccer goals or nets.
2. Listen when your coach is talking.
3. Stay in your practice areas. If your coach has to leave before your ride comes, please wait with a Rainbow Soccer staff person.
4. Kick soccer balls only, not people.
5. In case of an injury, all players sit down on the field.

Remember to smile and shake hands after every game!

Please drive slowly at the soccer fields. Watch out

SATURDAY, March 6, 2004

PEEPERS (3 & 4 YEAR OLDS)

9:00	Twisters - Peanuts	YF 7 N
	Saturn - Bees	YF 7 M
	Monkeys - Popcorn	YF 7 F
10:15	Ducks - Chickadees	YF 8 N
	Heffalumps - Abacadabra	YF 7 N
	Bingo - Bambinos	YF 7 M
	Leppfrogs - Crackerjacks	YF 7 F

PIPPIN (K - 5&6)

9:00	Fireflies - Booters	YF 7-8 N
	Dynamite - Gnomes	YF 7-8 M
	Blue Roosters - Gecko	YF 7-8 F
	Moonstones - Leprechauns	YF 8 F
10:15	Puffins - Unicorns	YF 7-8 N
	Sunrise - Pandas	YF 7-8 M
	Stars - Twilight	YF 7-8 F

PREMIER CO-ED (1st-2nd)

9:00	Gryffindore - Dragonflies	YF 10
10:15	Orion - La Bamba	YF 8
10:15	Jazz - Kicks	YF 10
11:30	Orcas - Cool	YF 7-8
12:45	Good Times - Greyhounds	YF 10
2:00	Cheetahs - Meteorites	YF 10

PREMIER GIRLS (1st-2nd)

11:30	Penguins - Cahow	YF 7
11:30	Cool - Orcas	YF 7-8
11:30	Dolphins - Koala	YF 8
11:30	Corona Red - Corona Blue	YF 10

PELE CO-ED (3rd-4th)

9:00	Pumas - Energy	YF 6
10:15	Moxie - Pegasus	YF 6

PELE GIRLS (3rd-4th)

9:00	Amigas - Macaws	YF 5
10:15	Unos - Deja Vu	YF 5

CLIPPER (5th-8th)

9:30	Prism - Wizards	YF 4
10:45	SurfRunners - WaveRunners	YF 4

SUNBOW (3rd-4th)

12:45	Celtic - Spurs	YF 6
2:00	Santos - Seekers	YF 6
3:15	Ajax - ADP	YF 6

SUNBOW GIRLS (3rd-4th)

11:30	Columbia - Sundance	YF 5
2:00	Artemis - Express	YF 5
3:15	Supersonics - Everton	YF 5

SUNBOW (5th - 8th)

10:45	Lightning - Lasers	YF 3
12:00	Thunder - Shamrocks	YF 3
1:15	Thunderbirds - Ashanti	YF 3
2:30	Red Eagles - Mustangs	YF 3

One issue is that there is no schedule of practices or scrimmages posted to the site. Another issue is that the schedule is not updated as it changes. For example, when a game is rescheduled due to weather concerns, the new date, time, and field are not posted

to the Rainbow Soccer website. Lastly, a player or parent of a player has to search through every column in the above schedule to find his/her game schedule. To conclude, there is nowhere on the website where one can find a complete, current schedule for just one team.

Proposed Solutions to Problems

The proposed solution is a field assignments database system that can be accessed via the web. This database would contain information about all teams, coaches, fields, and field assignments, such as games, practices, scrimmages, and make-up games. The database would need a web interface that is linked from the current Rainbow Soccer website so that coaches, players, and parents can access the information from virtually anywhere. The database should be optimized for ease of use and should require little training to input and retrieve data. The web interface should be self-explanatory.

This proposed system would allow users to access complete and up-to-date information as soon as the information is input into the database by the Rainbow staff. Thus, coaches would be able to see what dates and times that fields are available so they can schedule practices, scrimmages, or make-up games. Then, they could send requests to the Rainbow staff for fields at certain times on certain dates. Furthermore, the staff could grant the requests, update the database, and display the new scheduling information on the website with very little turn-around time. This process would lessen or possibly eliminate the need for emails and phone calls to team members regarding schedule information. Additionally, information integrity would be higher; less time would be needed to distribute the information; and less paper would be used to print schedules. In

conclusion, the information management process would be much more efficient and the user community would be able to access more information and more reliable information.

Literature Review

Microsoft Access

The proposed database system employs Microsoft Access as its relational database management system (RDBMS). Access is a product that comes bundled with Microsoft Office, though it can be purchased separately, to be used on Windows machines. It is used for personal applications as well as small business applications, as opposed to Oracle, which is typically used for larger applications (Elmasri & Navathe, 2000). Many users prefer Access because it has the “look and feel” of Windows along with its integration with other Microsoft Office family products, such as Excel and Word (Chapple).

Access provides not only a database engine, but also a graphical user interface. This interface provides design views, Wizards and Builders to aid in the design of a database application. Design views provide a low-tech method of creating queries, forms, and reports. Wizards use interactive programs that guide the user through a series of questions to help users quickly develop queries, forms, and reports. Builders are programs that help the users build syntactically correct expressions. SQL (structured query language) can also be used for data definition and manipulation (Elmasri & Navathe, 2000).

Access provides a user-friendly forms interface that allows users to enter information into the database through a graphical form. It also provides a reports

interface, which can quickly produce attractively formatted summaries of the data contained in one or more tables and/or queries (Chapple). Another aspect that makes Access easy to use is that it stores an entire database application within a single file (a .mdb file). Thus, the process of loading the database is much easier than with a larger RDBMS such as Oracle because only one file has to be opened and maintained (Elmasri & Navathe, 2000).

ColdFusion

The proposed database system uses ColdFusion, a server-side web development platform, along with standard HTML to create the web interface for the database system. The ColdFusion web application server allows developers to develop interactive and dynamic websites quickly with a small learning curve. ColdFusion Markup Language (CFML) is modeled after HTML, which makes it easy to learn for those with HTML experience. CFML extends HTML by adding tags with the following capabilities: read data from databases and tables, modify, update, or delete data in databases and tables, create dynamic data-driven pages, perform conditional processing, populate forms with live data, read and write client-side cookies, etc. (Forta, 1998).

ColdFusion was developed in the mid 1990's by Allaire but was later acquired by Macromedia. As of April 2004, the most current version is ColdFusion MX 6.1. This version is currently selling for \$1300.00 while other competitive platforms such as PHP and Perl are free. However, CFML is much easier to learn and work with than PHP or Perl (Alvey, 2003).

Development Process

Information Collection

The first step in the development process was to meet with Dr. Brad Hemminger, a representative of Rainbow Soccer. Dr. Hemminger also happens to be a professor in the School of Information and Library Science at the University of North Carolina at Chapel Hill. He informed me of Rainbow's need for a field assignment database system that could be accessed over the web. He told me about problems Rainbow has encountered as a result of the current system of assigning fields. Thus, we discussed the foundations of the new project: the database and the web interface.

First, we had to decide which RDBMS to use. Points to consider in making this decision were the technical expertise of the users (the administrative staff at Rainbow Soccer) and the amount of records to be stored in the database. Dr. Hemminger shared his thoughts regarding the staff's technical abilities and the types of information that would need to be stored. Due to the low database experience level and the small number of records to be stored, the obvious choice was Microsoft Access.

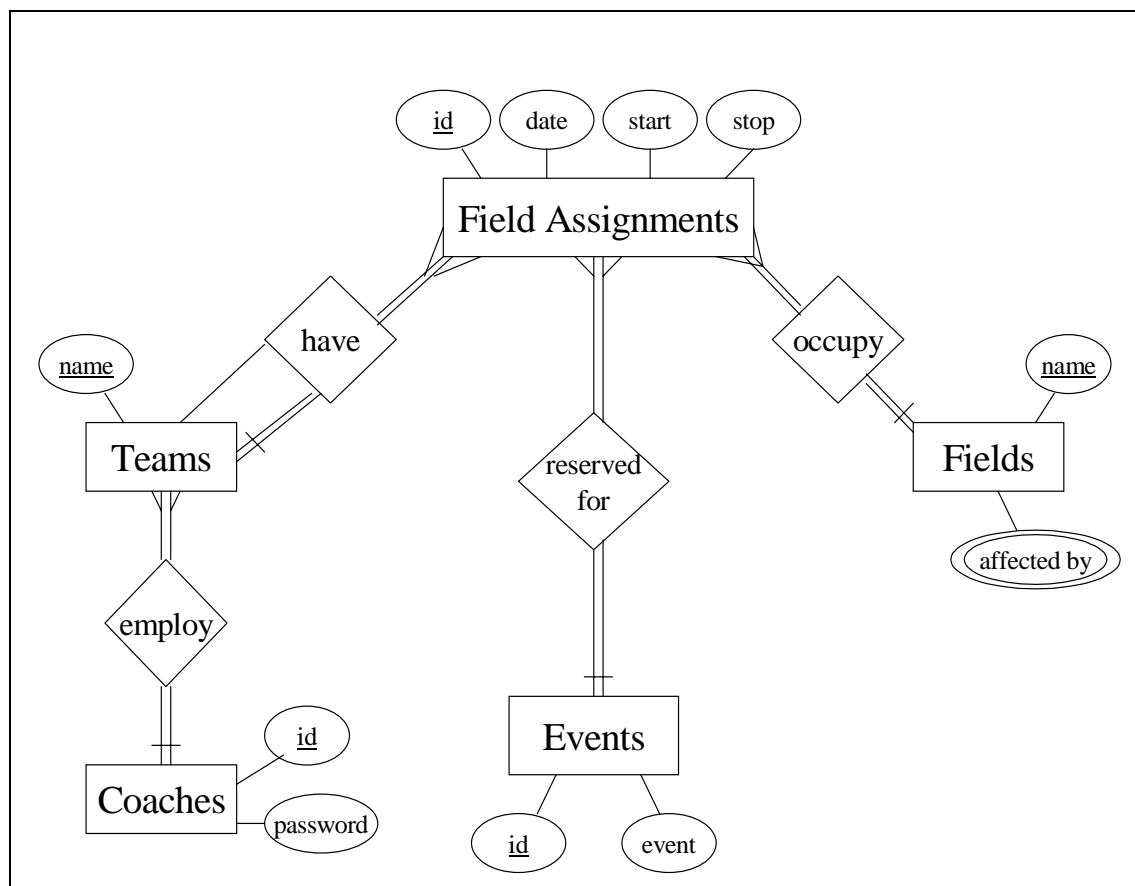
Next, we had to decide which platform to use to develop the web interface. We had to use a program that can interact with a database through an ODBC connection. The points to consider in making this decision were the availability of platforms for use by Rainbow Soccer, my experience with web development, and the ease of further development by others in the future. Because Dr. Hemminger is both a representative of Rainbow Soccer and a faculty member at UNC-CH, the web site can be run on a server at UNC-CH. Thus, there were several platform options including ASP, JSP, Perl, PHP, and

ColdFusion. I only had experience with ASP, PHP, and ColdFusion, so that eliminated a couple of options. ColdFusion is the easiest development tool to learn of the remaining three options. Therefore, it would be the easiest tool for someone else to use in the future if further development of this project is pursued. Consequently, Dr. Hemminger and I decided to use ColdFusion as the web development tool.

Database Design

The database was designed with six tables to contain the necessary information. The design is represented in the Entity-Relationship diagram below.

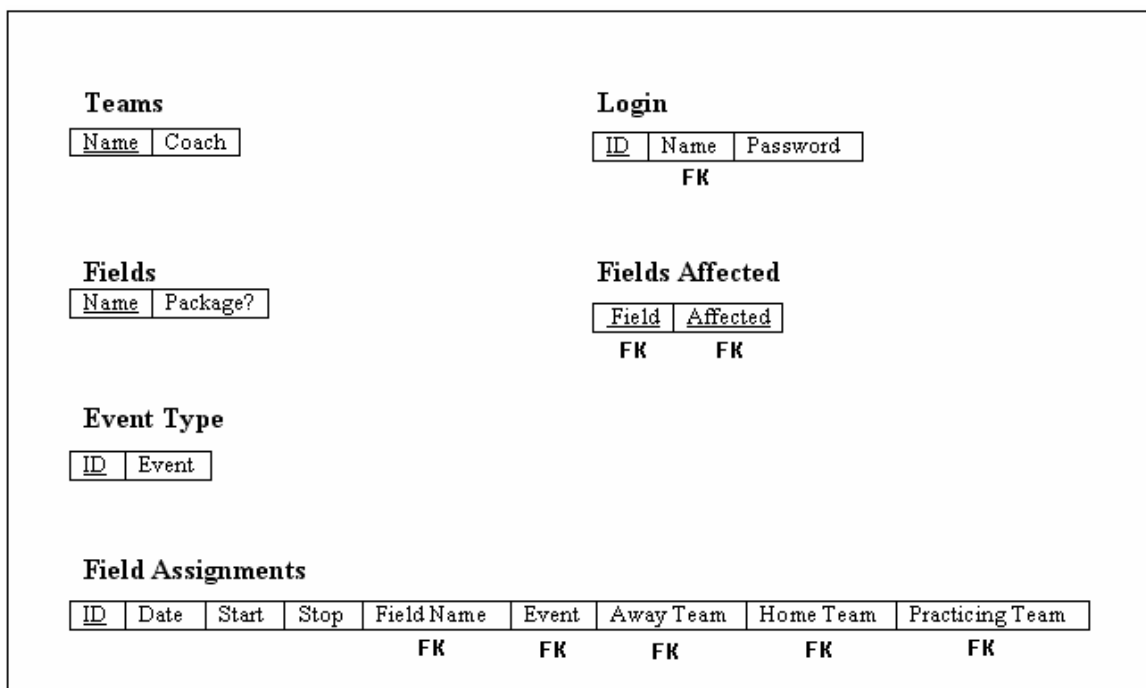
Figure 2 - Entity-Relationship Diagram



This diagram shows the teams, coaches, fields, event types, and field assignments as entities, and shows how the entities relate to one another. All teams employ one head coach, but a coach may coach more than one team. All teams have many field assignments and all field assignments have at least one team. Field assignments, such as games, involve two teams, causing a ternary relationship between teams and field assignments. Each of the field assignments is classified as a certain type of event and all types of events are accounted for in the field assignments table. Also, all field assignments occupy one field each, while each field has many field assignments scheduled. “Affected by” is a multi-valued attribute of the fields table; thus, it becomes its own table. That table lists which fields are in use when another field is being used.

The tables, along with their primary keys, foreign keys, and other attributes, are represented in the database schema below. The primary keys are underlined, while the foreign keys are denoted with the “FK” below the attribute.

Figure 3 - Database Schema



Steps were taken in the design process to ensure data integrity. The input forms for field assignments have drop-down lists from which to choose a field and the team(s) involved. Therefore, incorrectly named or misspelled team and field names will not enter the database. The “event type” attribute has a validation rule placed upon it; input must be “1” or “2” or “3” or “4”. Otherwise, the user gets a pop-up box that informs him/her that he/she must enter a value between one and four.

Web Interface

The web interface uses some of the design characteristics of the original Rainbow Soccer web site. Rainbow’s homepage was only altered by adding three links to the list on the left side of the page. Also, the Rainbow Soccer logo was copied and pasted at the top of every page of the new interface to provide continuity.

Similar to the database, the interface also has integrity constraints, such as drop-down lists and radio boxes. The “For Coaches” portion of the site employs several hidden fields in forms and a cookie to ensure the integrity of the field requests.

The page following the login page in the “For Coaches” section was designed for expansion of that particular section in the future. Currently, there is a table on that page with one link, “Check Field Availability”. If Rainbow Soccer decides in the future to offer more online options for coaches, that table will be easily expandable.

The code behind the interface is commented thoroughly. The comments were added so that it is clear which parts of the code provide certain functions. This practice is helpful to other programmers who may modify the code in the future.

Proposed Database System Instructions

There are three different user groups that will be utilizing the new database system. Each group has different needs and interests.

Rainbow Soccer Administration

This user group is deals with data entry and information retrieval. All data entry will be performed through Microsoft Access. Such data entry includes team names, coaches' names, coaches' login information, and field assignments. Some team names and coaches will change from season to season, but that will not require much data entry. Thus, such modifications will be made directly into the appropriate tables. However, there will be several-thousand field assignments (practices, games, scrimmages, make-up games) that need to be entered into the database each season. Therefore, data entry forms have been created to input the field assignments. These forms are easy to use and help to insure data integrity through the use of drop down lists for field names and team names. Two input forms were created: one for practices, and the other for games, scrimmages, and make-up games. An example is shown below.

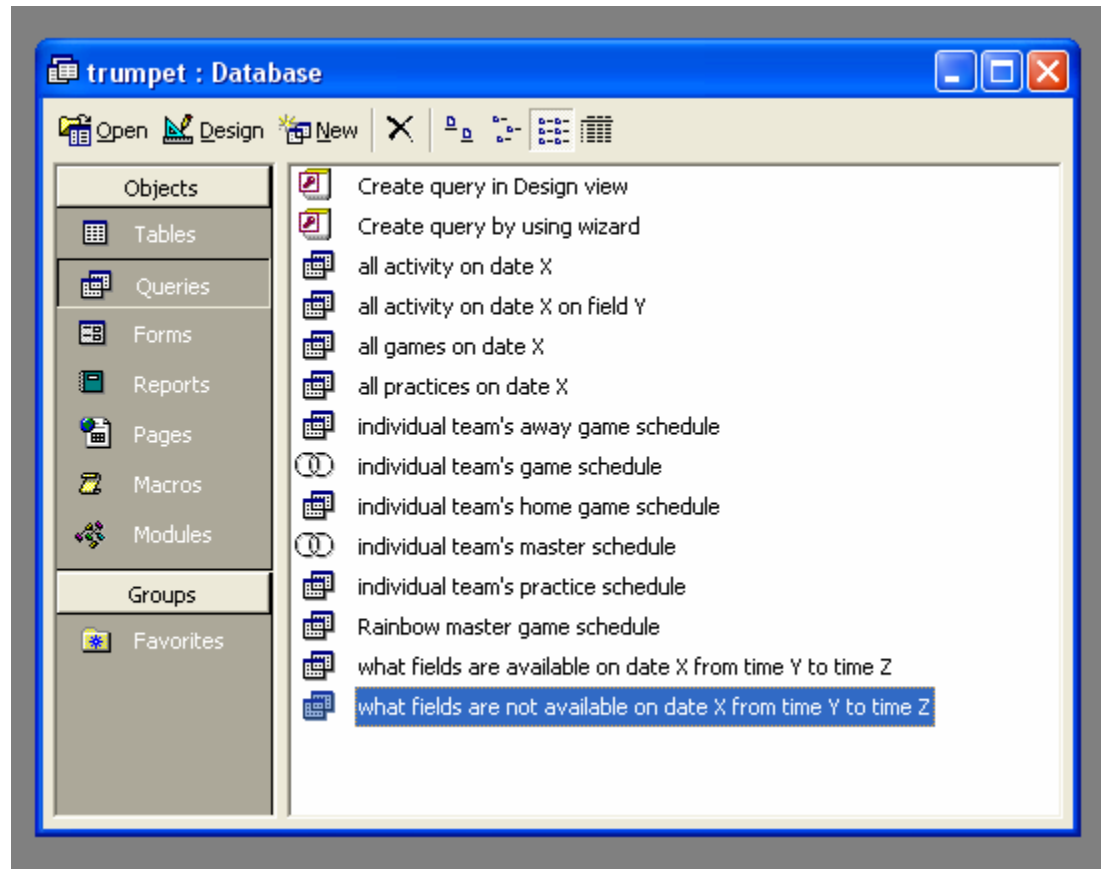
Figure 4 - MS Access: Data Entry Form for Practices

The screenshot displays a Microsoft Access data entry form titled "Practice Input (admin only)". The form is designed for administrative use and contains the following fields:

- FieldReservationID**: A text box containing the value "1".
- Date**: A date picker showing "Saturday, March 01, 2003".
- Start**: A time picker showing "8:45 AM".
- Stop**: A time picker showing "10:10 AM".
- Field**: A dropdown menu showing "YF7a".
- Type**: A text box containing the value "1".
- Practicing Team**: A dropdown menu.

At the bottom of the form, the status bar indicates "Record: 1 of 102", with navigation buttons for previous/next record, first/last record, and a search icon.

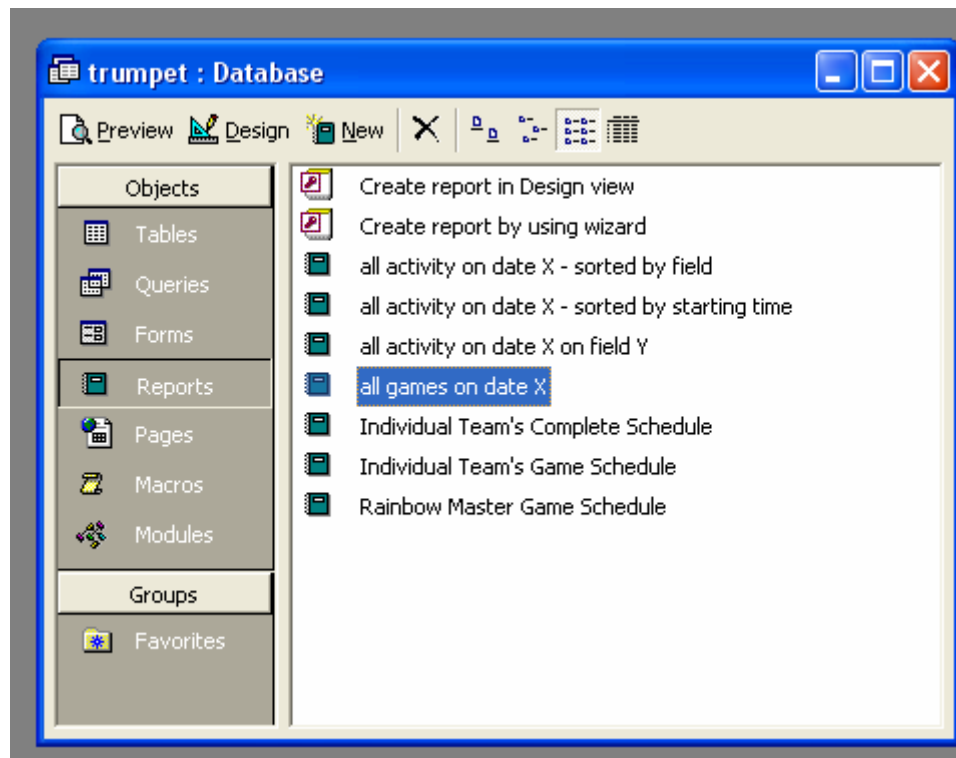
For the information retrieval process, the administrative staff will use queries and reports. There are twelve queries programmed into this database system. They are as follows:

Figure 5 - MS Access: List of Queries

To access a query, the user must click on “Queries” on the left side of the page, and then double-click on the chosen query. Most queries prompt the user to provide information such as a date, times, field name, or team name.

Along with viewing queries on the computer screen, the administrative staff will also be able to view and/or print information in the form of a report. There are seven reports available in this database system. They are as follows:

Figure 6 - MS Access: List of Reports



To access a report, the user must click on “Reports” on the left side of the page, and then double-click on the chosen report. Like queries, most reports prompt the user to provide information such as a date, field name, or team name.

All of the reports have the same visual layout. An example of a report is given below.

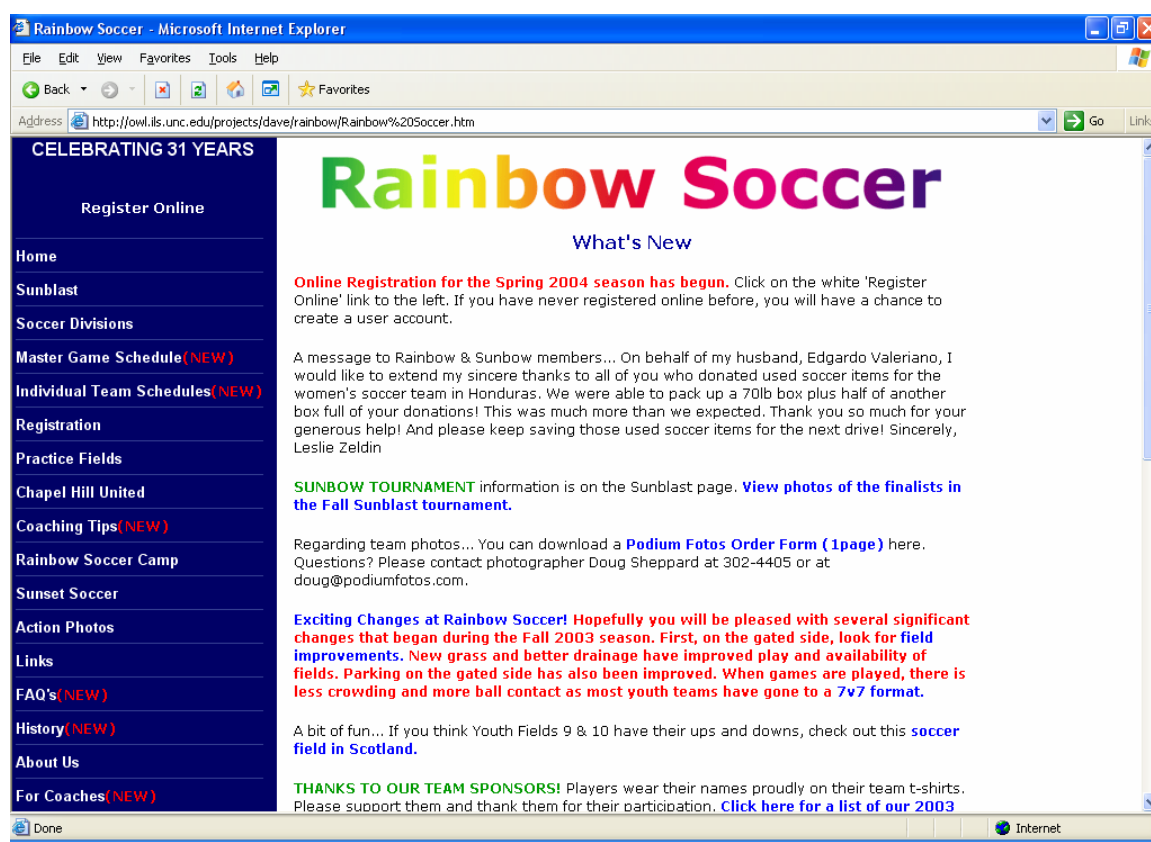
Figure 7 - Report: All Activity on Date X, Sorted by Starting Time and Stopping Time, Ascending

Rainbow Soccer						
All Activity On Saturday, March 01, 2003						
Start	Stop	Field	Event	AwayTeam	HomeTeam	Practicing Team
8:45 AM	10:10 AM	YF7 a	Game	Cheetahs	Popcorn	
9:00 AM	10:00 AM	YF10	Game	Moxie	Kicks	
9:00 AM	10:00 AM	YF3	Game	La Bamba	Aliens	
9:00 AM	10:00 AM	YF4	Game	Orcas	Orion	
9:00 AM	10:00 AM	YF7b	Game	Abracadabra	Rose	
9:00 AM	10:00 AM	YF9 a	Game	Aliens	Firefly	
9:00 AM	10:10 AM	YF9b	Game	Bananas	Twisters	
9:15 AM	10:15 AM	YF8 a	Game	Peanuts	Pandas	
9:15 AM	10:30 AM	YF8b	Game	Heffalumps	Ducks	
10:15 AM	11:15 AM	YF10	Game	Abracadabra	Pumas	
10:15 AM	11:15 AM	YF7b	Game	Saturn	Leapfrog	
10:15 AM	11:15 AM	YF9b	Game	Baklava	Heffalumps	
10:20 AM	11:30 AM	YF8 a	Game	Firefly	Saturn	
11:30 AM	12:30 PM	YF10	Game	Pumas	Moxie	
11:30 AM	12:30 PM	YF9	Game	Aliens	Jazz	

Public

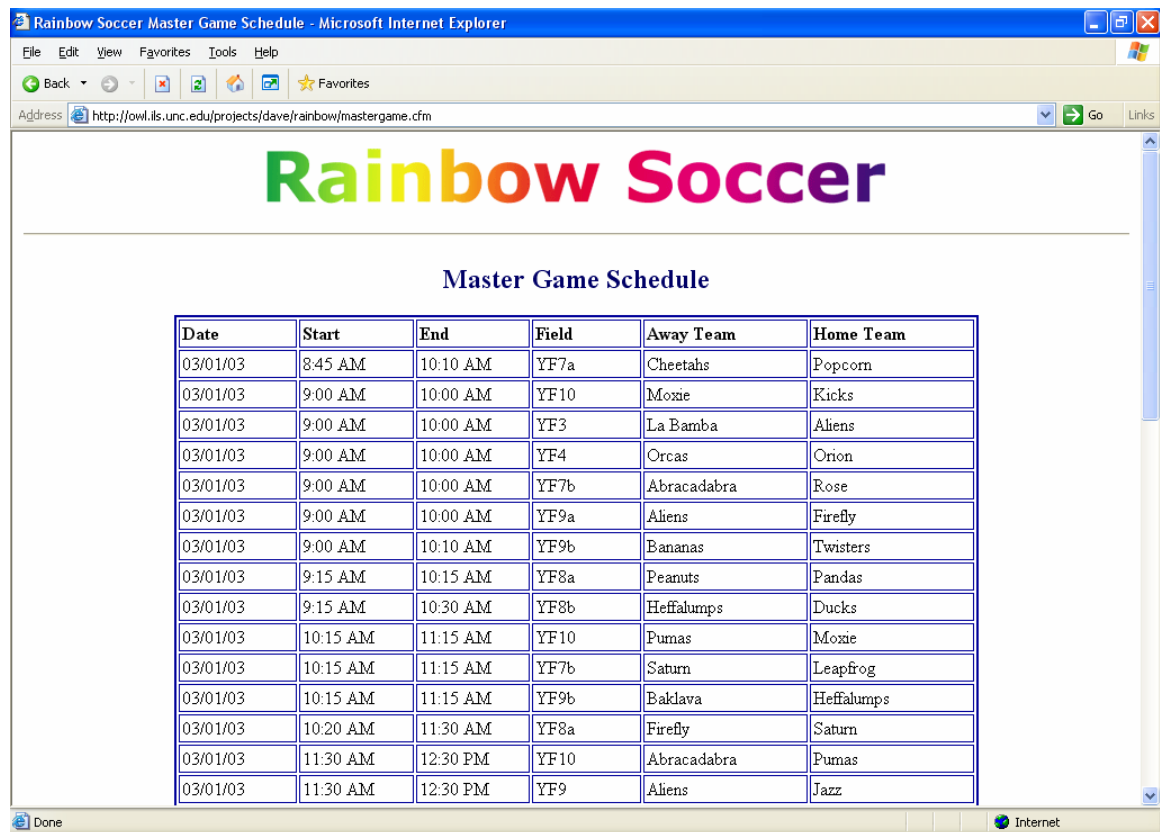
This user group primarily consists of players and parents or other family members of players. They will access the Rainbow Soccer website at <http://rainbowsoccer.org> and choose from various options on the left side of the page. The new database options are the “master game schedule” link, the “individual team schedules” link, and the “for coaches” link.

Figure 8 – Web Interface: Rainbow Soccer Homepage



To view a schedule of all Rainbow Soccer games, users will simply click “Master Game Schedule”. The games are ordered by date and starting time. This feature will largely be used by Rainbow staff or families with multiple players on different teams.

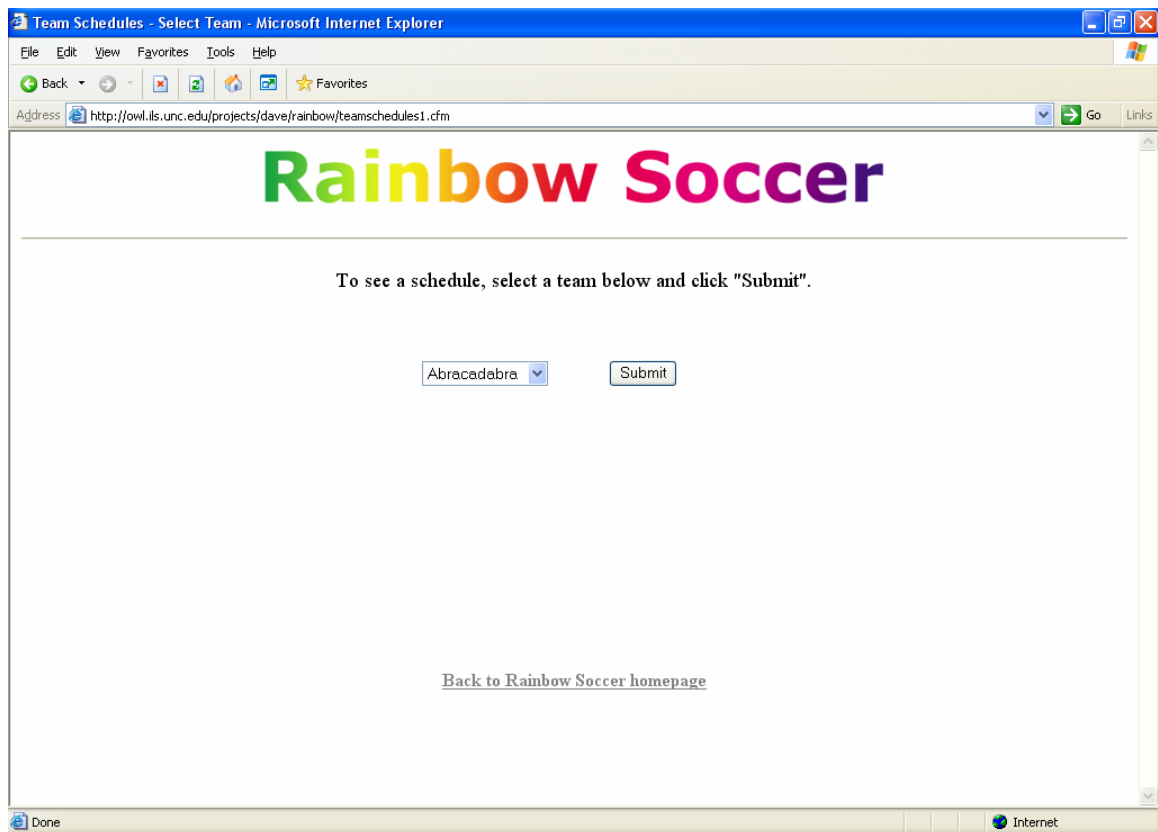
Figure 9 - Web Interface: Rainbow Soccer Master Game Schedule



Date	Start	End	Field	Away Team	Home Team
03/01/03	8:45 AM	10:10 AM	YF7a	Cheetahs	Popcorn
03/01/03	9:00 AM	10:00 AM	YF10	Mome	Kicks
03/01/03	9:00 AM	10:00 AM	YF3	La Bamba	Aliens
03/01/03	9:00 AM	10:00 AM	YF4	Orcas	Orion
03/01/03	9:00 AM	10:00 AM	YF7b	Abracadabra	Rose
03/01/03	9:00 AM	10:00 AM	YF9a	Aliens	Firefly
03/01/03	9:00 AM	10:10 AM	YF9b	Bananas	Twisters
03/01/03	9:15 AM	10:15 AM	YF8a	Peanuts	Pandas
03/01/03	9:15 AM	10:30 AM	YF8b	Heffalumps	Ducks
03/01/03	10:15 AM	11:15 AM	YF10	Pumas	Moxie
03/01/03	10:15 AM	11:15 AM	YF7b	Saturn	Leapfrog
03/01/03	10:15 AM	11:15 AM	YF9b	Baklava	Heffalumps
03/01/03	10:20 AM	11:30 AM	YF8a	Firefly	Saturn
03/01/03	11:30 AM	12:30 PM	YF10	Abracadabra	Pumas
03/01/03	11:30 AM	12:30 PM	YF9	Aliens	Jazz

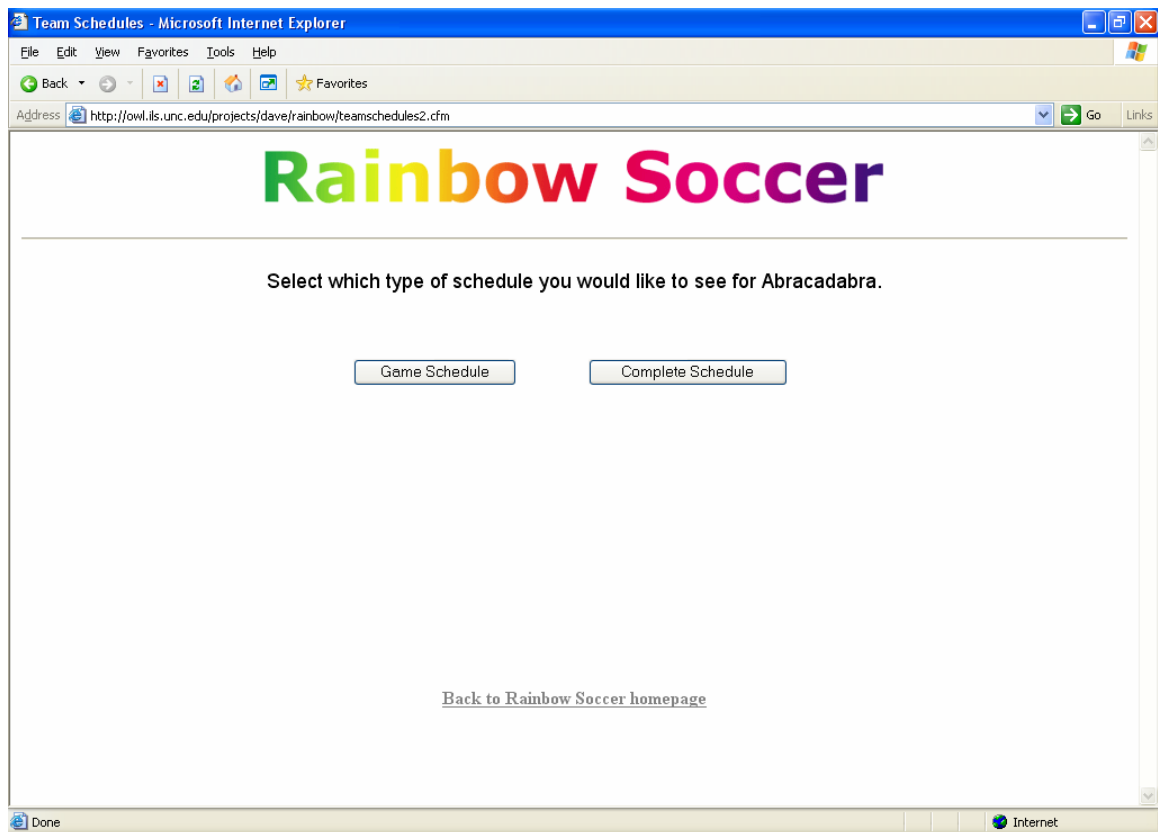
To view only one team's schedule, users will click "Individual Team Schedules". After arriving at the next page, users will be prompted to select a team from a drop-down list and click "Submit".

Figure 10 - Web Interface: Select Team for Schedules



Then, the user will have the option to view either a complete schedule, including practices and games, or to view only a game schedule. The user will click the appropriate button.

Figure 11 - Web Interface: Select Type of Schedule



Here is an example of a game schedule for a team named “Abracadabra”.

Figure 12 - Web Interface: Individual Team’s Game Schedule

Game Schedule for Abracadabra - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Favorites

Address <http://owl.ils.unc.edu/projects/dave/rainbow/teamgame.cfm> Go Links

game schedule for Abracadabra

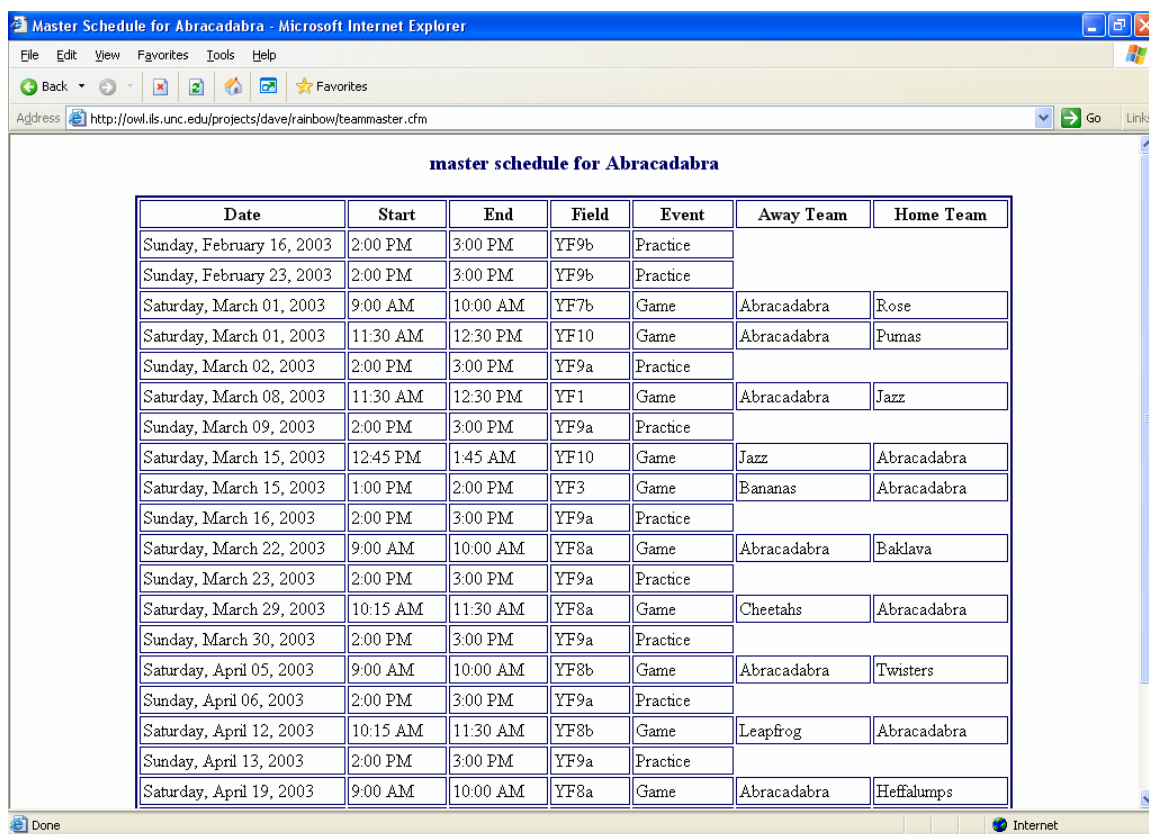
Date	Start	End	Field	Away Team	Home Team
Saturday, March 01, 2003	9:00 AM	10:00 AM	YF7b	Abracadabra	Rose
Saturday, March 01, 2003	11:30 AM	12:30 PM	YF10	Abracadabra	Pumas
Saturday, March 08, 2003	11:30 AM	12:30 PM	YF1	Abracadabra	Jazz
Saturday, March 15, 2003	12:45 PM	1:45 AM	YF10	Jazz	Abracadabra
Saturday, March 15, 2003	1:00 PM	2:00 PM	YF3	Bananas	Abracadabra
Saturday, March 22, 2003	9:00 AM	10:00 AM	YF8a	Abracadabra	Baklava
Saturday, March 29, 2003	10:15 AM	11:30 AM	YF8a	Cheetahs	Abracadabra
Saturday, April 05, 2003	9:00 AM	10:00 AM	YF8b	Abracadabra	Twisters
Saturday, April 12, 2003	10:15 AM	11:30 AM	YF8b	Leapfrog	Abracadabra
Saturday, April 19, 2003	9:00 AM	10:00 AM	YF8a	Abracadabra	Heffalumps
Saturday, April 26, 2003	10:15 AM	11:30 AM	YF9a	Bambinos	Abracadabra

[Back to Rainbow Soccer homepage](#)

Done Internet

Here is an example of a complete master schedule for “Abracadabra”.

Figure 13 - Web Interface: Individual Team’s Complete Schedule



The screenshot shows a Microsoft Internet Explorer window with the title 'Master Schedule for Abracadabra - Microsoft Internet Explorer'. The address bar displays 'http://owl.ils.unc.edu/projects/dave/rainbow/teammaster.cfm'. The main content area is titled 'master schedule for Abracadabra' and contains a table with the following data:

Date	Start	End	Field	Event	Away Team	Home Team
Sunday, February 16, 2003	2:00 PM	3:00 PM	YF9b	Practice		
Sunday, February 23, 2003	2:00 PM	3:00 PM	YF9b	Practice		
Saturday, March 01, 2003	9:00 AM	10:00 AM	YF7b	Game	Abracadabra	Rose
Saturday, March 01, 2003	11:30 AM	12:30 PM	YF10	Game	Abracadabra	Pumas
Sunday, March 02, 2003	2:00 PM	3:00 PM	YF9a	Practice		
Saturday, March 08, 2003	11:30 AM	12:30 PM	YF1	Game	Abracadabra	Jazz
Sunday, March 09, 2003	2:00 PM	3:00 PM	YF9a	Practice		
Saturday, March 15, 2003	12:45 PM	1:45 AM	YF10	Game	Jazz	Abracadabra
Saturday, March 15, 2003	1:00 PM	2:00 PM	YF3	Game	Bananas	Abracadabra
Sunday, March 16, 2003	2:00 PM	3:00 PM	YF9a	Practice		
Saturday, March 22, 2003	9:00 AM	10:00 AM	YF8a	Game	Abracadabra	Baklava
Sunday, March 23, 2003	2:00 PM	3:00 PM	YF9a	Practice		
Saturday, March 29, 2003	10:15 AM	11:30 AM	YF8a	Game	Cheetahs	Abracadabra
Sunday, March 30, 2003	2:00 PM	3:00 PM	YF9a	Practice		
Saturday, April 05, 2003	9:00 AM	10:00 AM	YF8b	Game	Abracadabra	Twisters
Sunday, April 06, 2003	2:00 PM	3:00 PM	YF9a	Practice		
Saturday, April 12, 2003	10:15 AM	11:30 AM	YF8b	Game	Leapfrog	Abracadabra
Sunday, April 13, 2003	2:00 PM	3:00 PM	YF9a	Practice		
Saturday, April 19, 2003	9:00 AM	10:00 AM	YF8a	Game	Abracadabra	Heffalumps

The individual team schedules will be viewed primarily by parents, players, and coaches.

Coaches

Coaches will have access to a section of the website that the public does not need to access. This section will have several options, including the option to check up-to-date field availability on a given date and time. This feature will help coaches schedule practices, scrimmages, and make-up games at convenient times.

The coaches will access the Rainbow Soccer website at <http://rainbowsoccer.org> and click on the “forcoaches” link at the bottom-left of the page. The link will send them

to a login page. Here, they will enter a username (first and last names) and a password. The password will need to be setup on an individual basis with the administrative staff. If the username and the password do not match the database, the form will clear and the coach will have the opportunity to re-enter the login information.

Figure 14 - Web Interface: Coaches' Login Page

Coaches Login - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Favorites

Address <http://owl.ils.unc.edu/projects/dave/rainbow/forcoaches.htm> Go Links

Rainbow Soccer

Coaches

Login Here:

Username:	<input type="text" value="John Smith"/>
Password:	<input type="password" value="....."/>
<input type="button" value="Submit"/>	

Done Internet

Once a coach clicks “Submit”, he/she will be directed to the following page. At the moment, this page only has one option, to check field availability. However, the page will be able to support more options in the future.

Figure 15 - Web Interface: Coaches' Options Page



After clicking “check field availability”, the coach will be sent to a page with a form. The coach will enter the date, starting time, and ending time that he/she needs a field. There are directions just above the form on how to format the entries.

Figure 16 - Web Interface: Form to Check Field Availability

form to check field availability - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Favorites

Address <http://owl.ils.unc.edu/projects/dave/rainbow/fieldavailability1.cfm> Go Links

Rainbow Soccer

To check for available fields on a certain date at a certain time, click in the box next to the desired field(s) and fill out the form below.

Please use the following format for your entries:

Date - mm/dd/yy (e.g. 3/05/04)
Starting Time - h:mm am/pm (e.g. 8:30 am)
Ending Time - h:mm am/pm (e.g. 11:00 am)

Date:

Starting Time:

Ending Time:

[Back to Rainbow Soccer homepage](#)

Done Internet

The coach will then click “Submit”.

Next to appear is a page with a list of fields available between the specified times on the specified date. The list is ordered from adult fields to youth fields to kids fields in order to make it easier to find a desired field. There are radio buttons next to the field names. The coach will click the radio button next to the desired field and then click “Submit”.

Figure 17 - Web Interface: Form to Select an Available Field

Checking Field Availability - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Favorites

Address <http://owl.ils.unc.edu/projects/dave/rainbow/fieldavailability2.cfm> Go Links

The following fields are available on 3/1/03 from 9:00 AM to 10:00 AM.

Click on the radio button next to your desired field, then click the "Submit" button at the bottom.

<input type="radio"/> AF2
<input type="radio"/> AF4
<input type="radio"/> YF1
<input checked="" type="radio"/> YF2
<input type="radio"/> YF5
<input type="radio"/> YF6
<input type="radio"/> YF1a
<input type="radio"/> YF1m
<input type="radio"/> YF1b
<input type="radio"/> YF2a
<input type="radio"/> YF2m
<input type="radio"/> YF2b
<input type="radio"/> YF7m
<input type="radio"/> YF8m
<input type="radio"/> YF9m

Submit

[Back to Rainbow Soccer Homepage](#)

Internet

Subsequently, the coach will be sent to the page where he/she will actually request the field. On this page will be a form that is mostly completed. The previously inputted information is derived from the forms on the preceding pages. The coach only has to select his/her team's name from a drop-down list and review the information already completed in the form. If the coach would like to make changes to the form, he/she can click "Back to Field Availability Form" to return to the form where time and date changes can be made. Otherwise, if the form satisfies the coach, he/she will click "Submit" to send the form information to the Rainbow Soccer administrative staff. This information will be sent via an email.

Figure 18 - Web Interface: Form to Request a Field

Form for requesting a field - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Favorites

Address <http://owl.ils.unc.edu/projects/dave/rainbow/requestfield.cfm> Go Links

Rainbow Soccer

To request a field:

1. select your team name
2. review information in form
3. to make changes, click "Back to Field Availability Form"
4. if correct, click "Submit"

Team Name: Abracadabra	Date: 3/1/03
Coach: John Smith	Starting Time: 9:00
Field: YF2	Ending Time: 10:00

Submit Request Back to Field Availability Form

[Back to Rainbow Soccer Homepage](#)

Done Internet

As of April 12, 2004, the proposed web interface could be accessed at <http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm>.

Future

This proposed information system should meet the needs of Rainbow Soccer for years. However, additions to the system could enhance its capabilities in the future. One feature that was proposed to me by the Rainbow staff was a graphical representation of all field assignments, in addition to the lists I formed. However, this feature was beyond my technical and coding abilities at the time this paper was written. Another modification could be to enhance the visual layout and grouping of the master game schedule. The current Rainbow Soccer master schedule has games divided by league and ordered by starting time. The proposed system only lists all games by starting times because I was unable to make the database divide teams into leagues and layout properly.

The ColdFusion platform will have to run on the server at UNC-CH, or Rainbow will have to invest in that platform to run a server of its own. I do not know the life expectancy of the ColdFusion server at UNC-CH, but I expect that Rainbow Soccer will be able to use that server as long as Dr. Brad Hemminger is on staff at the School of Information and Library Science.

I commented the web pages thoroughly so that another programmer could easily understand my code in the future. Since this is the first database system used by Rainbow Soccer, I expect this system to be modified and for its capabilities to grow in order to meet the future needs of Rainbow Soccer.

Conclusion

The main goals of this project were to fix the two biggest issues with the Rainbow Soccer information system. Both issues were solved within the users' capabilities and my technical constraints. The proposed system is more efficient and the information contained in the system will be more accurate. Additions and modifications should be made to the system as both the organization and technology grow. However, the proposed system should meet the needs of Rainbow Soccer for the foreseeable future.

Bibliography

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Rainbow Soccer Website. Retrieved April 5, 2004, from <http://rainbowsoccer.org/index.html>.

Appendix A - Database Queries in SQL

All activity on date X

```
SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field
Assignments].HomeTeam, [Field Assignments].[Practicing Team]
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field Assignments].Type
WHERE ((([Field Assignments].Date)=[Enter date]))
ORDER BY [Field Assignments].Start, [Field Assignments].Fname;
```

All games on date X

```
SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field Assignments].Type
WHERE ((([Field Assignments].Date)=[Enter date]) AND (([Field Assignments].Type)=1));
```

All practices on date X

```
SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, EventType.Event, [Field Assignments].[Practicing Team]
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field Assignments].Type
WHERE ((([Field Assignments].Date)=[Enter date]) AND (([Field Assignments].Type)=2));
```

All activity on date X on field Y

```
SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field
Assignments].HomeTeam, [Field Assignments].[Practicing Team]
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field Assignments].Type
WHERE ((([Field Assignments].Date)=[Enter date]) AND (([Field Assignments].Fname)=[Enter field
name]));
```

Rainbow Soccer master game schedule

```
SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam
FROM Teams AS Teams_1 INNER JOIN (Teams INNER JOIN [Field Assignments] ON Teams.Name =
[Field Assignments].AwayTeam) ON Teams_1.Name = [Field Assignments].HomeTeam
WHERE ((([Field Assignments].Type)=1))
ORDER BY [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Fname;
```

Individual team's complete schedule

```
(SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field
Assignments].HomeTeam, [Field Assignments].[Practicing Team]
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field
Assignments].Type
```

```

WHERE ((([Field Assignments].AwayTeam)=[Enter Team Name]) AND (([Field Assignments].[Practicing Team]) Is Null)))
UNION
(SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam, [Field Assignments].[Practicing Team]
FROM EventType INNER JOIN [Field Assignments] ON EventType.[TypeID] = [Field Assignments].Type
WHERE ((([Field Assignments].HomeTeam)=[Enter Team Name]) AND (([Field Assignments].[Practicing Team]) Is Null)))
UNION (SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam, [Field Assignments].[Practicing Team]
FROM EventType INNER JOIN [Field Assignments] ON EventType.[TypeID] = [Field Assignments].Type
WHERE ((([Field Assignments].AwayTeam) Is Null) AND (([Field Assignments].HomeTeam) Is Null) AND (([Field Assignments].[Practicing Team])=[Enter Team Name])))
ORDER BY [Field Assignments].Date, [Field Assignments].Start;

```

Individual team's game schedule

```

(SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field Assignments].Fname, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam
FROM EventType INNER JOIN [Field Assignments] ON EventType.[TypeID] = [Field Assignments].Type
WHERE ((([Field Assignments].AwayTeam)=[Enter Team Name]) AND (([Field Assignments].[Practicing Team]) Is Null)))
UNION (SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field Assignments].Fname, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam
FROM EventType INNER JOIN [Field Assignments] ON EventType.[TypeID] = [Field Assignments].Type
WHERE ((([Field Assignments].HomeTeam)=[Enter Team Name]) AND (([Field Assignments].[Practicing Team]) Is Null)))
ORDER BY [Field Assignments].Date, [Field Assignments].Start;

```

Individual team's practice schedule

```

SELECT [Field Assignments].[Practicing Team], [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field Assignments].Fname
FROM [Field Assignments]
WHERE ((([Field Assignments].[Practicing Team])=[Enter Team Name]))
ORDER BY [Field Assignments].Date, [Field Assignments].Start;

```

Individual team's away game schedule

```

SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field Assignments].Type
WHERE ((([Field Assignments].AwayTeam)=[Enter Away Team Name]))
ORDER BY [Field Assignments].Date, [Field Assignments].Start;

```

Individual team's home game schedule

```

SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field Assignments].Type
WHERE ((([Field Assignments].HomeTeam)=[Enter Home Team Name]))
ORDER BY [Field Assignments].Date, [Field Assignments].Start;

```

What fields are available on date X from time Y to time Z?

```

SELECT [Fields].[name]
FROM Fields
WHERE name
NOT IN
(SELECT [Fields Affected].Affected
FROM [Fields Affected]
WHERE Field
IN
(SELECT [Field Assignments].[Fname]
FROM [Field Assignments]
WHERE [Field Assignments].[Date]=[Enter date] AND
((([Field Assignments].[Start]<=[Enter start time]) AND ([Field Assignments].[Stop]>=[Enter stop
time]))
Or
(( [Field Assignments].[Start]<=[Enter start time]) AND ([Field Assignments].[Stop] Between
[Enter start time] And [Enter stop time]))
Or
((([Field Assignments].[Start] Between [Enter start time] AND [Enter stop time]) AND ([Field
Assignments].[Stop] Between [Enter start time] And [Enter stop time]))
Or
((([Field Assignments].[Start] Between [Enter start time] AND [Enter stop time]) AND ([Field
Assignments].[Stop]>=[Enter stop time])) ) ) );

```

What fields are not available on date X from time Y to time Z?

```

SELECT DISTINCT [Fields Affected].[Affected]
FROM [Fields Affected]
WHERE Field IN
(SELECT [Field Assignments].[Fname]
FROM [Field Assignments]
WHERE (([Field Assignments].[Date]=[Enter date]) AND ([Field Assignments].[Start]<=[Enter start
time]) AND ([Field Assignments].[Stop]>=[Enter stop time])) Or (([Field Assignments].[Date]=[Enter
date]) AND ([Field Assignments].[Start]<=[Enter start time]) AND ([Field Assignments].[Stop] Between
[Enter start time] And [Enter stop time])) Or (([Field Assignments].[Date]=[Enter date]) AND ([Field
Assignments].[Start] Between [Enter start time] AND [Enter stop time]) AND ([Field Assignments].[Stop]
Between [Enter start time] And [Enter stop time])) Or (([Field Assignments].[Date]=[Enter date]) AND
([Field Assignments].[Start] Between [Enter start time] AND [Enter stop time]) AND ([Field
Assignments].[Stop]>=[Enter stop time])));

```

Appendix B - Cold Fusion Code

Code for Rainbow Soccer.htm

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<!-- saved from url=(0029)http://www.rainbowsoccer.org/ -->
<HTML lang=en-US><HEAD><TITLE>Rainbow Soccer</TITLE>
<META http-equiv=Content-Type content="text/html; charset=utf-8"><LINK
href="Rainbow Soccer_files/newstyles.htm" type=text/css rel=stylesheet>
<META content="MSHTML 6.00.2800.1276" name=GENERATOR></HEAD>
<BODY bottomMargin=0 bgColor=#000066 leftMargin=0 topMargin=0 rightMargin=0>
<TABLE cellSpacing=0 cellPadding=0 border=0>
  <TBODY>
    <TR>
      <TD width="190" vAlign=top>
        <TABLE cellSpacing=0 cellPadding=3 width=235>
          <TBODY>
            <TR>
              <TD width="227" vAlign=top>
                <P>
                  <H4>CELEBRATING 31 YEARS</H4><BR>
                  <CENTER><A style="FONT-SIZE: 10pt; COLOR: white"
href="https://secure2.ninewire.com/~rainbowsoccer.org/onlinereg/signin.html"
target=_blank>Register Online</A></CENTER>
                  <p><IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
                  <A class=menu href="http://www.rainbowsoccer.org/index.html">Home</A><BR>
                  <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
                  <A class=menu href="http://www.rainbowsoccer.org/intro.html">Sunblast</A><BR>
                  <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
                  <A class=menu href="http://www.rainbowsoccer.org/divisions.html">SoccerDivisions</A><BR>
                  <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
                  <A class=menu href="http://owl.ils.unc.edu/projects/dave/rainbow/mastergame.cfm">Master
Game Schedule</A><B style="COLOR: #ff0000">(NEW)</B><BR>
                  <!-- This link was added by Dave S. in Spring, 2004 -->
                  <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
                  <A class=menu
href="http://owl.ils.unc.edu/projects/dave/rainbow/teamschedules1.cfm">Individual
Team Schedules</A><B style="COLOR: #ff0000">(NEW)</B><BR>
                  <!-- This link was added by Dave S. in Spring, 2004 -->
                  <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
                  <A class=menu href="http://www.rainbowsoccer.org/registration.html">Registration</A><BR>
                  <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
                  <A class=menu href="http://www.rainbowsoccer.org/fields.html">Practice Fields</A><BR>
                  <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
                  <A class=menu href="http://www.chapelhillunited.org/" target=_blank>Chapel Hill
United</A><BR>
                  <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
                  <A class=menu href=http://www.ils.unc.edu/bmh/soccer/young.htm target=_blank>Coaching
Tips</A><B style="COLOR: #ff0000">(NEW)</B><BR>
```

```

    <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
    <A class=menu href="http://www.rainbowsoccercamp.com/" target=_blank>Rainbow Soccer
Camp</A><BR>
    <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
    <A class=menu href="http://www.rainbowsoccer.org/sunset.html">Sunset Soccer</A><BR>
    <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
    <A href=http://www.photorelect.com/scripts/prsm.dll?storefront?b=1&amp;c=04D4
target=_blank class=menu>Action Photos</A><BR>
    <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
    <A class=menu href="http://www.rainbowsoccer.org/links.html">Links </A><BR>
    <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
    <A class=menu href="http://www.ils.unc.edu/bmh/soccer/Rainbow_FAQ.htm">FAQ's</A><B
style="COLOR: #ff0000">(NEW)</B><BR>
    <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
    <A class=menu
href="http://www.ils.unc.edu/bmh/soccer/RainbowHistoryGoals.htm">History</A><B style="COLOR:
#ff0000">(NEW)</B><BR>
    <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
    <A class=menu href="http://www.rainbowsoccer.org/about.html">About Us</A><BR>
    <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
    <A class=menu href="http://owl.ils.unc.edu/projects/dave/rainbow/forcoaches.htm">For
Coaches</A><B style="COLOR: #ff0000">(NEW)</B><BR>
    <!-- This link was added by Dave S. in Spring, 2004 -->
    <IMG height=1 src="Rainbow Soccer_files/lightblue.gif" width=220><BR>
</p>
</B>
</TD>
</TR>
</TBODY>
</TABLE>
</TD>
<TD width="800" vAlign=top bgColor=#ffffff>
<TABLE cellSpacing=0 cellPadding=15 width=610 border=0>
<TBODY>
<TR>
<TD vAlign=top bgColor=white colSpan=2><IMG height=49 alt="Rainbow Soccer" src="Rainbow
Soccer_files/logo4.gif" width=600 border=0>
<SCRIPT language=JavaScript>
<!--var BROWSER_NAME = navigator.appName;
var plat = navigator.appVersion;
if (BROWSER_NAME && navigator.appName.indexOf("Netscape")>=0 &&
navigator.appVersion.indexOf("4.7")>=0) { document.write('<b>This Website is best viewed using
Internet Explorer or a more recent version of Netscape.</b>');}
//-->
</SCRIPT>
<H3 align=center>What's New</H3>
<P>
<B style="COLOR: #ff0000">Online Registration for the Spring 2004 season has begun.</B> Click
on the white 'Register Online' link to the left. If you have never registered online before, you will have a
chance to create a user account.
<P>A message to Rainbow & Sunbow members... On behalf of my husband, Edgardo
Valeriano, I would like to extend my sincere thanks to all of you who donated used soccer items for the
women's soccer team in Honduras. We were able to pack up a 70lb box plus half of another box full of your
donations! This was much more than we expected. Thank you so much for your generous help! And please
keep saving those used soccer items for the next drive! Sincerely, Leslie Zeldin

```

<P><B style="COLOR: #009900">SUNBOW TOURNAMENT information is on the Sunblast page. View photos of the finalists in the Fall Sunblast tournament.

<P>Regarding team photos... You can download a Podium Fotos Order Form (1page) here. Questions? Please contact photographer Doug Sheppard at 302-4405 or at doug@podiumfotos.com.

<P><Ahref="http://www.ils.unc.edu/bmh/soccer/Rainbow2003Changes.htm">Exciting Changes at Rainbow Soccer! <B style="COLOR: #ff0000">Hopefully you will be pleased with several significant changes that began during the Fall 2003 season. First, on the gated side, look for field improvements. New grass and better drainage have improved play and availability of fields. Parking on the gated side has also been improved. When games are played, there is less crowding and more ball contact as most youth teams have gone to a 7v7 format.

<P>A bit of fun... If you think Youth Fields 9 & 10 have their ups and downs, check out this soccer field in Scotland.

<P><B style="COLOR: #009900">THANKS TO OUR TEAM SPONSORS!Players wear their names proudly on their team t-shirts. Please support them and thank them for their participation. Click here for a list of our 2003 team sponsors.

<P><B style="COLOR: #009900">The Bilingual Nature Trail at the Rainbow Soccer fields (gated side) is open. Follow the signs around the pond. </P>

</TD>

</TR>

<TR>

<TD vAlign=top width=305>

<H3 align=center> Upcoming Events

</H3>Chapel Hill United (Challenge) tryouts will be on Saturday, December 6, 1:00 pm - 3:00 pm at the Rainbow Soccer Fields (Youth Field #3). Rain date: Saturday, December 13 at 1:00-3:00 pm. (Note: a soccer ball, water bottle, soccer shoes and shinguards are required for tryouts.)

</TD>

<TD vAlign=top width=305>

<H3 align=center> Daily Weather

</H3>Winter 2003-2004

Our fields need their rest and will be closed to the general public until the Spring season. Many areas will be re-seeded. As tempting as it may be, please stay off all fields until late February. Thank you!

<P>Phone updates:
• 990-3036 (1pm) for the Rainbow, Orange and Smith Athletic fields.
• 685-8277 (3pm) for the Scroggs Elementary and Cedar Falls/Homestead Park fields.

<P>Check the weather forecast at WRAL.

<P>Read our Weather Policy.</P>

</TD>

</TR>

<TR>

<TD vAlign=top width=305>

<H3 align=center>Volunteers Wanted!</H3>


```

        <P>We are always looking for volunteers to act as coaches or referees. If you are interested in
        volunteering, please fill-out a coach or referee card, both of which can be found in the Rainbow soccer
        registration pamphlet. </P>
    </TD>
    <TD vAlign=top width=305>
        <H3 align=center>Use this Website to:</H3>
        <UL>
            <LI><A href="http://www.rainbowsoccer.org/about.html">Learn more</A> about Rainbow
            Soccer.
            <LI><A href="http://www.rainbowsoccer.org/registration.html">Register and pay</A> for a
            season using our Online Registration system or by printing a registration form.
            <LI>View the Rainbow <A href="http://www.rainbowsoccer.org/gameschedule.html">game
            schedule</A>.
            <LI>Learn about <A href="http://www.rainbowsoccer.org/links.html">soccer-related
            activities</A> in the Triangle.
        </LI>
    </UL>
    </TD>
</TR>
</TBODY>
</TABLE>
<TABLE height=30 cellSpacing=0 cellPadding=5 width=610 bgColor=#ffffff border=0>
<TBODY>
<TR>
<TD style="FONT-SIZE: 8pt" align=middle>Send comments and questions about the website to <A
style="FONT-SIZE: 8pt"
href="mailto:webmaster@rainbowsoccer.org">webmaster@rainbowsoccer.org</A>
</TD>
</TR>
</TBODY>
</TABLE>
</TD>
</TR>
</TBODY>
</TABLE>
</BODY>
</HTML>

```

Code for mastergame.cfm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: mastergame.cfm --->
<!-- This page displays a list of all games played by all teams. --->
<!-- Get data from database. --->

<CFQUERY NAME="rainbow_master_game_schedule" DATASOURCE="trumpet">
SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam
FROM Teams AS Teams_1 INNER JOIN (Teams INNER JOIN [Field Assignments] ON Teams.Name =
[Field Assignments].AwayTeam) ON Teams_1.Name = [Field Assignments].HomeTeam
WHERE ((([Field Assignments].Type)=1))
ORDER BY [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Fname
</CFQUERY>

<!-- Create HTML page. --->
<HTML>

```

```

<HEAD>
  <TITLE>Rainbow Soccer Master Game Schedule</TITLE>
</HEAD>
<BODY>
<p align="center"></p>
<hr>
<p align="center"><strong><font color="#000066" size="5">Master Game Schedule</font></strong></p>

<!-- Create the table. --->
<TABLE width="715" border="2" align="center" cellpadding="2" cellspacing="2"
bordercolor="#000099">
  <TR>
    <TH width="105"><div align="left"><font size="3">Date</font></div></TH>
    <TH width="105"><div align="left"><font size="3">Start</font></div></TH>
    <TH width="105"><div align="left"><font size="3">End</font></div></TH>
    <TH width="100"><div align="left"><font size="3">Field</font></div></TH>
    <TH width="150"><div align="left"><font size="3">Away Team</font></div></TH>
    <TH width="150"><div align="left"><font size="3">Home Team</font></div></TH>
  </TR>

  <!-- Fill in the table using cold fusion. --->
  <CFOUTPUT QUERY="rainbow_master_game_schedule">
    <TR>
      <TD width="105"><font size="3">#DateFormat(Date, "MM/DD/YY")#</font></TD>
      <TD width="105"><font size="3">#TimeFormat(Start, "h:mm tt")#</font></TD>
      <TD width="105"><font size="3">#TimeFormat(Stop, "h:mm tt")#</font></TD>
      <TD width="100"><font size="3">#Fname#</font></TD>
      <TD width="150"><font size="3">#AwayTeam#</font></TD>
      <TD width="150"><font size="3">#HomeTeam#</font></TD>
    </TR>
  </CFOUTPUT>
</TABLE>
<p>&nbsp;</p>
<p>&nbsp;</p>

<!-- Link back to the Rainbow Soccer homepage --->
<p align="center"><a
href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to Rainbow
Soccer homepage</strong></a> </p>
</BODY>
</HTML>

<!-- end of page --->

```

Code for teamschedules1.cfm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: teamschedules1.cfm --->
<!-- This page allows the user to chose a certain team for whom to view a schedule. --->

<html>
<head>
<title>Team Schedules - Select Team</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">

```

```

</head>
<body>

<!-- Get data from database. --->
<CFQUERY NAME="teamlist" DATASOURCE="trumpet">
SELECT Name FROM Teams ORDER BY Name
</CFQUERY>

<div align="center">
  <p> </p>
  <hr>
  <p><font size="4">To see a schedule, select a team below and click &quot;Submit&quot;.</font></p>
  <p>&nbsp;</p>
  <form name="form1" method="post" action="teamschedules2.cfm">
    <table width="300" border="0" cellspacing="2" cellpadding="2">
      <tr>
        <td width="125"> <div align="right">
          <select name="Name">
            <cfoutput query="teamlist">
              <option>#Name#</option>
            </cfoutput>
          </select>
        </div>
        </td>
        <td width="50"><div align="center"> </div></td>
        <td width="125"> <div align="left">
          <input type="submit" name="Submit" value="Submit">
        </div>
        </td>
      </tr>
    </table>
  </form>

  <p>&nbsp;</p>
  <p>&nbsp;</p>
  <p>&nbsp;</p>
  <p>&nbsp;</p>
  <p>&nbsp;</p>
  <p>&nbsp;</p>

  <!-- Link back to the Rainbow Soccer homepage --->
  <p><a href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to
Rainbow Soccer homepage</strong></a> </p>
</div>
</body>
</html>

<!-- end of page --->

```

Code for teamschedules2.cfm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: teamschedules2.cfm --->
<!-- This page allows the user to chose which type of schedule he/she would like to view. --->

```

```
<html>
<head>
<title>Team Schedules</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
</head>
<body>
<div align="center">
  <p> </p>
  <hr>
  <p><font size="4" face="Arial, Helvetica, sans-serif">Select which type of schedule you would like to
see for <cfoutput>#FORM.Name#</cfoutput>.</font></p>
<p>&nbsp;</p>
  <table width="450" border="0" cellspacing="1" cellpadding="1">
    <tr>
      <td><form name="form2" method="post" action="teamgame.cfm">
        <div align="center">
          <input type="hidden" name="Name" value=<cfoutput>#FORM.Name#</cfoutput>>
          <input type="submit" name="Submit2" value="Game Schedule">
        </div>
      </form>
    </td>
    <td><form name="form1" method="post" action="teammaster.cfm">
      <div align="center">
        <input type="hidden" name="Name" value=<cfoutput>#FORM.Name#</cfoutput>>
        <input type="submit" name="Submit" value="Complete Schedule">
      </div>
    </form>
    </td>
  </tr>
</table>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<!-- Link back to the Rainbow Soccer homepage --->
<p><a href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to
Rainbow Soccer homepage</strong></a></p>
</div>
</body>
</html>

<!-- end of page --->
```

Code for teamgame.cfm

```
<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: teamgame.cfm --->
<!-- This page displays a chosen team's game schedule. --->

<!-- Get data from database. --->
```

```

<CFQUERY NAME="teamgame" DATASOURCE="trumpet">
(SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam
FROM EventType INNER JOIN [Field Assignments] ON EventType.[TypeID] = [Field
Assignments].Type
WHERE ((([Field Assignments].AwayTeam)= '#FORM.Name#') AND ((([Field Assignments].[Practicing
Team]) Is Null)))
UNION
(SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, [Field Assignments].AwayTeam, [Field Assignments].HomeTeam
FROM EventType INNER JOIN [Field Assignments] ON EventType.[TypeID] = [Field
Assignments].Type
WHERE ((([Field Assignments].HomeTeam)= '#FORM.Name#') AND ((([Field Assignments].[Practicing
Team]) Is Null)))
ORDER BY [Field Assignments].Date, [Field Assignments].Start
</CFQUERY>

```

```

<!-- Create HTML page. --->

```

```

<HTML>

```

```

<HEAD>

```

```

    <TITLE>Game Schedule for <CFOUTPUT > #FORM.Name# </CFOUTPUT></TITLE>
</HEAD>

```

```

<BODY>

```

```

<p align="center"><strong><font color="#000066" size="4" face="Arial, Helvetica, sans-serif">game
schedule for <CFOUTPUT > #FORM.Name# </CFOUTPUT></font></strong></p>

```

```

<!-- Create the table. --->

```

```

<TABLE width="690" height="30" border="2" align="center" cellpadding="2" cellspacing="2"
bordercolor="#000066">

```

```

    <TR>

```

```

        <TH width="200">Date</TH>

```

```

        <TH width="90">Start</TH>

```

```

        <TH width="90">End</TH>

```

```

        <TH width="70">Field</TH>

```

```

        <TH width="120">Away Team</TH>

```

```

        <TH width="120">Home Team</TH>

```

```

    </TR>

```

```

<!-- Fill in the table using cold fusion. --->

```

```

<CFOUTPUT QUERY="teamgame">

```

```

    <TR>

```

```

        <TD width="200">#DateFormat(Date, "DDDD, MMMM DD, YYYY")#</TD>

```

```

        <TD width="90">#TimeFormat(Start, "h:mm tt")#</TD>

```

```

        <TD width="90">#TimeFormat(Stop, "h:mm tt")#</TD>

```

```

        <TD width="70">#Fname#</TD>

```

```

        <TD width="120">#AwayTeam#</TD>

```

```

        <TD width="120">#HomeTeam#</TD>

```

```

    </TR>

```

```

</CFOUTPUT>

```

```

</TABLE>

```

```

<p>&nbsp;</p>

```

```

<p>&nbsp;</p>

```

```

<p>

```

```

<!-- Link back to the Rainbow Soccer homepage --->
</p>
<p align="center"><a
href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to Rainbow
Soccer homepage</strong></a> </p>
</BODY>
</HTML>

<!-- end of page --->

```

Code for teammaster.cfm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: teammaster.cfm --->
<!-- This page displays a chosen team's master schedule (all games, scrimmages, practices, etc.). --->

<HTML>
<HEAD>
<TITLE>Master Schedule for <CFOUTPUT > #FORM.Name# </CFOUTPUT></TITLE>
</HEAD>

<!-- Get data from database. --->
<CFQUERY NAME="teammaster" DATASOURCE="trumpet">
(SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field
Assignments].HomeTeam, [Field Assignments].[Practicing Team]
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field Assignments].Type
WHERE ((([Field Assignments].AwayTeam) = '#FORM.Name#') AND (([Field Assignments].[Practicing
Team]) Is Null)))
UNION
(SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field
Assignments].HomeTeam, [Field Assignments].[Practicing Team]
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field Assignments].Type
WHERE ((([Field Assignments].HomeTeam) = '#FORM.Name#') AND (([Field Assignments].[Practicing
Team]) Is Null)))
UNION
(SELECT [Field Assignments].Date, [Field Assignments].Start, [Field Assignments].Stop, [Field
Assignments].Fname, EventType.Event, [Field Assignments].AwayTeam, [Field
Assignments].HomeTeam, [Field Assignments].[Practicing Team]
FROM EventType INNER JOIN [Field Assignments] ON EventType.TypeID = [Field Assignments].Type
WHERE ((([Field Assignments].AwayTeam) Is Null) AND (([Field Assignments].HomeTeam) Is Null)
AND (([Field Assignments].[Practicing Team]) = '#FORM.Name#'))
ORDER BY [Field Assignments].Date, [Field Assignments].Start
</CFQUERY>

<!-- Create HTML page. --->
<BODY>
<p align="center"><strong><font color="#000066" size="4">master schedule for <CFOUTPUT >
#FORM.Name# </CFOUTPUT></font></strong></p>

<!-- Create the table. --->
<TABLE width="780" height="30" border="2" align="center" cellpadding="2" cellspacing="2"
bordercolor="#000066">

```

```

<TR>
  <TH width="200">Date</TH>
  <TH width="90">Start</TH>
  <TH width="90">End</TH>
  <TH width="70">Field</TH>
  <TH width="90">Event</TH>
  <TH width="120">Away Team</TH>
  <TH width="120">Home Team</TH>
</TR>

<!-- Fill in the table using cold fusion. --->
<CFOUTPUT QUERY="teammaster">
  <TR>
    <TD width="200">#DateFormat(Date, "DDDD, MMMM DD, YYYY")#</TD>
    <TD width="90">#TimeFormat(Start, "h:mm tt")#</TD>
    <TD width="90">#TimeFormat(Stop, "h:mm tt")#</TD>
    <TD width="70">#Fname#</TD>
    <TD width="90">#Event#</TD>
    <TD width="120">#AwayTeam#</TD>
    <TD width="120">#HomeTeam#</TD>
  </TR>
</CFOUTPUT>
</TABLE>
<p>&nbsp;</p>

<p>
<!-- Link back to the Rainbow Soccer homepage --->
</p>
<p align="center"><a
href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to Rainbow
Soccer homepage</strong></a> </p>
</BODY>
</HTML>

<!-- end of page --->

```

Code for forcoaches.htm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: forcoaches.htm --->

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
  <title>Coaches Login</title>
  <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
</head>

<body>
  <div align="center">
    <p></p>
    <hr>
    <p><font size="7">Coaches</font></p>
    <p><font size="4">Login Here:</font></p>

```

```

<form name="form1" method="post" action="login.cfm">
<table width="230" border="2" cellspacing="1" cellpadding="3">
  <tr>
    <td width="80"><strong>Username:</strong></td>
    <td width="180"><input name="username" type="text" id="username"></td>
  </tr>
  <tr>
    <td><strong>Password:</strong></td>
    <td><input name="password" type="password" id="password"></td>
  </tr>
  <tr>
    <td colspan="2"><div align="center"><input type="submit" name="Submit"
value="Submit"></div></td>
  </tr>
</table>
</form>
<p>&nbsp;</p>
<p>&nbsp;</p>
</div>
</body>
</html>

<!-- end of page --->

```

Code for login.cfm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: login.cfm --->

<!-- This page checks a user's username and password against the database. --->
<CFQUERY name="login" datasource="trumpet">SELECT id FROM login WHERE
name='#FORM.username#' AND password='#FORM.password#'</CFQUERY>

<!-- If the user's username and password are correct, the user will be sent to the forcoaches2.cfm page. --->
<CFIF login.RecordCount IS 1>
<cfinclude template="forcoaches2.cfm">

<!-- If the user's username and password are incorrect, the user will encounter another blank login form on
the forcoaches.htm page. --->
<CFELSE>
<cfinclude template="forcoaches.htm">
</CFIF>

<!-- end of page --->

```

Code for forcoaches2.cfm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: forcoaches2.cfm --->

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>

```



```

<head>
<title>Coaches Options</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
</head>

<body bgcolor="#FFFFFF" text="#000000" link="#0000FF" vlink="#0000FF" alink="#0000FF">
<div align="center">
<p></p>
<hr>

<!-- Set a cookie now --->

<!-- If the user arrived at this page by way of the login page (forcoaches.htm), then this page will execute
in the following manner.--->
<cfif IsDefined("form.username") is True>
<p align="center"><font size="6"><strong>Welcome, <cfoutput>#form.username#</cfoutput>.
</strong></font></p>
<p align="center">&nbsp;</p>
<cfcookie name="username" value="#form.username#" expires="2">
<p align="center"><font size="4">Click on an option below.</font></p>
<p align="center">&nbsp;</p>
<table width="175" border="2" align="center" cellpadding="4" cellspacing="2">
<tr>
<td width="160"><div align="center"><strong><a
href="http://owl.ils.unc.edu/projects/dave/rainbow/fieldavailability1.cfm">check field
availability</a></strong></div></td>
</tr>
</table>
<p align="center">&nbsp;</p>
<p align="center">Note: Currently, there is only one option. More options to come later. </p>
<p align="center">&nbsp;</p>
<p align="center">&nbsp;</p>
<p align="center">&nbsp;</p>
<p align="center">&nbsp;</p>
<p align="center">&nbsp;</p>
<p align="center"><a
href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to Rainbow
Soccer homepage</strong></a> </p>
<p align="center">

<!-- If the user arrived at this page without logging in on the forcoaches.htm page, then the user will get
the following message. --->
<cfelse>
<p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<font size="4">Please go to the <a href="forcoaches.htm">login page</a>. </font>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>
<!-- Link back to homepage --->
</p>

```

```

    <p align="center"><a href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm">Back
to Rainbow Soccer homepage</a> </p>
</cfif>
</div>
</body>
</html>

<!-- end of page -->

```

Code for fieldavailability1.cfm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: fieldavailability1.htm --->
<!-- This page allows coaches to query field availability by entering the date and times they need a field. --
->

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
    <title>form to check field availability</title>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
</head>

<body>
<div align="center">
    <p> </p>
    <hr>

    <!-- If the user arrived at this page by way of the login page (forcoaches.htm) and the forcoaches2.cfm
    page, then this page will execute in the following manner.--->
    <cfif IsDefined("cookie.username") is True>
        <p><font size="4">To check for available fields on a certain date at a certain
        time, click in the box next to the desired field(s) and fill out the form
        below.</font></p>
        <table width="397" border="0" cellspacing="2" cellpadding="1">
            <tr>
                <td colspan="3"><div align="center"><font size="4">Please use the following format for your entries:
</font></div></td>
            </tr>
            <tr>
                <td width="223"><div align="right">Date - </div></td>
                <td width="5">&nbsp;</td>
                <td width="363"> mm/dd/yy (e.g. 3/05/04)</td>
            </tr>
            <tr>
                <td><div align="right">Starting Time - </div></td>
                <td>&nbsp;</td>
                <td> h:mm am/pm (e.g. 8:30 am)</td>
            </tr>
            <tr>
                <td height="21"><div align="right">Ending Time - </div></td>
                <td>&nbsp;</td>
                <td>h:mm am/pm (e.g. 11:00 am)</td>
            </tr>

```

```

</table>

<form name="form1" method="post" action="fieldavailability2.cfm">
<table width="295" height="260" border="3" cellpadding="2" cellspacing="2">
<tr>
<td width="325" height="250" colspan="4" bgcolor="#FFFF00">
<table width="275" height="233" border="0" align="center" cellpadding="5" cellspacing="1">
<tr>
<td width="149"><p align="right"><font size="5">Date:</font></p></td>
<td width="103"><input name="Date" type="text" size="12"></td>
</tr>
<tr>
<td><p align="right"><font size="5">Starting Time:</font></p></td>
<td><input name="Start" type="text" size="12"></td>
</tr>
<tr>
<td><div align="right"><font size="5">Ending Time:</font></div></td>
<td><input name="Stop" type="text" size="12"></td>
</tr>
<tr valign="bottom">
<td height="51" colspan="2"><div align="center"><input type="submit" name="Submit"
value="Submit"></div></td>
</tr>
</table>
</td>
</tr>
</table>
</form>

<p>
<!-- Link back to the Rainbow Soccer homepage --->
<a href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to
Rainbow Soccer homepage</strong></a> </p>
<!-- If the user arrived at this page without logging in on the forcoaches.htm page, then the user will
get the following message. --->
<cfelse></p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<font size="4">Please go to the <a href="forcoaches.htm">login page</a>. </font>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>
<!-- Link back to homepage --->
<p>
<p align="center"><a
href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm">Back to Rainbow Soccer
homepage</a> </p>
</cfif>
</div>
</body>
</html>

```

```
<!-- end of page --->
```

Code for fieldavailability2.cfm

```
<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: fieldavailability2.htm --->
<!-- This page displays the available fields per the date and times requested in the form in
fieldavailability1.cfm, and allows coaches to chose an available field by clicking a radio button. --->

<HTML>
<HEAD>
<TITLE>Checking Field Availability</TITLE>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1"></HEAD>

<!-- Get data from database. --->

<CFQUERY NAME="fieldavailability" DATASOURCE="trumpet">
SELECT Fields.name
FROM Fields
WHERE name NOT IN
  (SELECT [Fields Affected].Affected
   FROM [Fields Affected]
   WHERE Field IN
     (SELECT [Field Assignments].[Fname]
      FROM [Field Assignments]
      WHERE [Field Assignments].[Date]= ###DateFormat(FORM.Date)### AND
        (([Field Assignments].[Start]<= ###TimeFormat(FORM.Start)###) AND ([Field
Assignments].[Stop]>= ###TimeFormat(FORM.Stop)###))
      Or
        (([Field Assignments].[Start]<= ###TimeFormat(FORM.Start)###) AND ([Field
Assignments].[Stop] Between ###TimeFormat(FORM.Start)### And ###TimeFormat(FORM.Stop)###))
      Or
        (([Field Assignments].[Start] Between ###TimeFormat(FORM.Start)### AND
###TimeFormat(FORM.Stop)###) AND ([Field Assignments].[Stop] Between
###TimeFormat(FORM.Start)### And ###TimeFormat(FORM.Stop)###))
      Or
        (([Field Assignments].[Start] Between ###TimeFormat(FORM.Start)###AND
###TimeFormat(FORM.Stop)###) AND ([Field Assignments].[Stop]>=
###TimeFormat(FORM.Stop)###)) )
  )
)
</CFQUERY>

<!-- Create HTML page. --->

<cfif IsDefined("cookie.username") is True>

<BODY link="#0000FF" vlink="#0000FF" alink="#0000FF">
  <p align="center"><font color="#000000" size="4">The following fields are available on <CFOUTPUT
><font color="##FF0000">#FORM.Date#</font> </CFOUTPUT> from <CFOUTPUT > <font
color="##FF0000">#TimeFormat(FORM.Start, "h:mm tt")#</font></CFOUTPUT> to <CFOUTPUT >
<font color="##FF0000">#TimeFormat(FORM.Stop, "h:mm tt")#</font></CFOUTPUT>. </font></p>
```

```

    <p align="center"><font color="#000000" size="4">Click on the radio button next to your desired field,
then click the &quot;Submit&quot; button at the bottom.<strong>
    </strong></font>
    <!-- Create form to send chosen field name to requestfield.cfm --->
    <p>
    <form name="form1" method="post" action="requestfield.cfm">
    <table width="88" height="30" border="1" align="center" cellpadding="2" cellspacing="1"
bordercolor="#000000">
    <cfoutput query="fieldavailability">
    <tr>
    <td width="84"><input name="field" type="radio" value="#name#" checked <font
color="##000000">#name#</font></td>
    </tr>
    </cfoutput>
    </table>
    <p align="center">
    <input type="hidden" name="Date" value=<cfoutput>#FORM.Date#</cfoutput>>
    <input type="hidden" name="Start" value=<cfoutput>#FORM.Start#</cfoutput>>
    <input type="hidden" name="Stop" value=<cfoutput>#FORM.Stop#</cfoutput>>
    <input type="submit" name="Submit" value="Submit">
    </p>
    </form>

    <!-- Link back to homepage --->
    <p align="center"><a
href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to Rainbow
Soccer Homepage</strong></a> </p>
    <div align="center">
    <cfelse></p>
    </div>
    <p align="center">&nbsp;</p>
    <p align="center">&nbsp;</p>
    <div align="center"><font size="4">Please go to the <a href="forcoaches.htm">login
page</a>. </font> </div>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <p align="center">
    <!-- Link back to homepage --->
    <p>
    <p align="center"><a href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm">Back
to Rainbow Soccer homepage</a> </p>

    </BODY>
    </cfif>
    </HTML>

    <!-- end of page --->

```

Code for requestfield.cfm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: requestfield.cfm --->

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<title>Form for requesting a field</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">

<script language="JavaScript" type="text/JavaScript">
<!--
function MM_reloadPage(init) { //reloads the window if Nav4 resized
if (init==true) with (navigator) {if ((appName=="Netscape")&&(parseInt(appVersion)==4)) {
document.MM_pgW=innerWidth; document.MM_pgH=innerHeight; onresize=MM_reloadPage; }}
else if (innerWidth!=document.MM_pgW || innerHeight!=document.MM_pgH) location.reload();
}
MM_reloadPage(true);
//-->
</script>

</head>

<!-- Get data from database. --->
<CFQUERY NAME="teamlist2" DATASOURCE="trumpet">
SELECT Name FROM Teams ORDER BY name
</CFQUERY>

<body bgcolor="#000066" text="#FFFFFF" link="#FFCC00" vlink="#66FF66" alink="#FFCC00">
<div align="center">
<p></p>
<hr>

<!-- If the user arrived at this page by way of the login page (forcoaches.htm), the forcoaches2.cfm page,
the fieldavailability1.cfm page, and the fieldavailability2.cfm page, then this page will execute in the
following manner.--->
<cfif IsDefined("cookie.username") is True>

<!-- Directions for the user on how to use this page. --->
<table width="649" border="0" cellspacing="2" cellpadding="2">
<tr>
<td colspan="2" valign="top"><div align="center"><font size="5" face="Arial, Helvetica, sans
serif"><strong>To request a field:</strong></font><font size="5"></font></div></td>
</tr>
<tr>
<td width="28" valign="top"><font size="5">1. </font></td>
<td width="607"><font size="5"><font face="Arial, Helvetica, sans-serif">select your team
name</font></font></td>
</tr>
<tr>
<td width="28" valign="top"><font size="5" face="Arial, Helvetica, sans-serif">2. </font></td>
<td><font size="5" face="Arial, Helvetica, sans-serif">review information in form</font></td>
</tr>
<tr>
<td width="28" valign="top"><font size="5" face="Arial, Helvetica, sans-serif">3. </font></td>

```

```

        <td><font size="5" face="Arial, Helvetica, sans-serif">to make changes, click &quot;Back to Field
Availability Form&quot;</font><font size="5">&nbsp;</font></td>
    </tr>
    <tr>
        <td valign="top"><font size="5">4. </font></td>
        <td><font size="5"><font face="Arial, Helvetica, sans-serif">if correct, click
&quot;Submit&quot;</font></font></td>
    </tr>
</table>
<form name="form1" method="post" action="requestfieldresults.cfm">
    <div align="left">
        <table width="588" border="4" align="center" cellpadding="1" cellspacing="2">
            <tr>
                <td width="574"> <table width="566" height="174" border="0" align="center" cellpadding="3"
cellspacing="1">
                    <tr>
                        <td width="119" height="60" align="right"> <div align="right"><font color="#FFFFFF" size="4"
face="Arial, Helvetica, sans-serif"><strong>Team Name:</strong></font></div></td>
                        <td width="160" height="60"> <div align="left"><font color="#FFFF00" size="4" face="Arial,
Helvetica, sans-serif">
                            <select name="Team">
                                <cfoutput query="teamlist2">
                                    <option>#Name#</option>
                                </cfoutput>
                            </select>
                        </font></div></td>
                        <td width="140" height="60" align="right" valign="middle"> <div align="right"><font
color="#FFFFFF" size="4" face="Arial, Helvetica, sans-serif"><strong>Date:</strong></font></div></td>
                        <td width="118" height="60" align="left" valign="middle"><font color="#FFFF00" size="4"
face="Arial, Helvetica, sans-serif"><cfoutput>#FORM.Date#</cfoutput></font></td>
                    </tr>
                    <tr>
                        <td height="60" align="right"><div align="right"><font color="#FFFFFF" size="4" face="Arial,
Helvetica, sans-serif"><strong>Coach:</strong></font></div></td>
                        <td width="160" height="60"> <div align="left"><font color="#FFFF00" size="4" face="Arial,
Helvetica, sans-serif"></font><font color="#FFFF00" size="4" face="Arial, Helvetica, sans-
serif"><cfoutput> <div align="left">#cookie.username#</div></cfoutput></font></div></td>
                        <td width="140" height="60" align="right" valign="middle"> <div align="right"><font
color="#FFFFFF" size="4" face="Arial, Helvetica, sans-serif"><strong>Starting
Time:</strong></font></div></td>
                        <td height="60" align="left" valign="middle"><div align="left"><font color="#FFFF00" size="4"
face="Arial, Helvetica, sans-serif"><cfoutput>#FORM.Start#</cfoutput></font></div></td>
                    </tr>
                    <tr>
                        <td height="60" align="right"><div align="right"><font color="#FFFFFF" size="4" face="Arial,
Helvetica, sans-serif"><strong>Field:</strong></font></div></td>
                        <td width="160" height="60"><font color="#FFFF00" size="4" face="Arial, Helvetica, sans-
serif"><cfoutput><div align="left"><font color="#FFFF00" size="4" face="Arial, Helvetica, sans-
serif">#FORM.field#</font></div></cfoutput></font></td>
                        <td width="140" height="60" align="right" valign="middle"> <div align="right"><font
color="#FFFFFF" size="4" face="Arial, Helvetica, sans-serif"><strong>Ending Time:
</strong></font></div></td>
                        <td height="60" align="left" valign="middle"> <div align="left"><font color="#FFFF00" size="4"
face="Arial, Helvetica, sans-serif"><cfoutput>#FORM.Stop#</cfoutput></font></div></td>
                    </tr>
                </table>
            </td>
        </table>
    </div>
</form>

```

```

</td>
</tr>
</table>
<table width="419" border="0" align="center" cellpadding="2" cellspacing="2">
  <tr valign="bottom">
    <td width="159" height="63"><div align="right"><input type="submit" name="Submit" value="Submit
Request"></div></td>
    <td width="34">&nbsp;</td>
    <td width="206">
      <table width="203" border="0" align="center" cellpadding="1" cellspacing="1" bordercolor="#000000"
bgcolor="#EAEAEA">
        <tr>
          <td width="204"> <div align="center"><a
href="http://owl.ils.unc.edu/projects/dave/rainbow/fieldavailability1.cfm"><font color="#000000">Back to
Field Availability Form</font></a></div></td>
        </tr>
      </table>
    </td>
  </tr>
</table>
<p>&nbsp;</p>
</div>
</form>
<p>

<!-- Link back to homepage --->
  <a href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to
Rainbow Soccer Homepage</strong></a> </p>

<!-- If the user arrived at this page without logging in on the forcoaches.htm page, then the user will get
the following message. --->
  <cfelse>
    <p>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <font size="4">Please go to the <a href="forcoaches.htm">login page</a>. </font>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <p>&nbsp;</p>
    <p>&nbsp;</p>

  <p>
  <!-- Link back to homepage --->
  <p>
  <p align="center"><a href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm">Back
to Rainbow Soccer homepage</a></p>
  </cfif>

</div>
</body>
</html>

<!-- end of page --->

```


Code for requestfieldresults.cfm

```

<!-- This page was created by David Smithwick in the Spring of 2004. --->
<!-- Name: requestfieldresults.cfm --->

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<title>Your field request</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
</head>

<body>
<p><font size="4" face="Arial, Helvetica, sans-serif">The form will be submitted in an email in the future
to a Rainbow Soccer administrator. That process has not been finalized at this moment. Thus, you have
been directed to this page. This is the final page in the project.</font></p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p align="center">&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>
<p>&nbsp;</p>

<!-- Link back to homepage --->
<p align="center"><a
href="http://owl.ils.unc.edu/projects/dave/rainbow/Rainbow%20Soccer.htm"><strong>Back to Rainbow
Soccer homepage</strong></a></p>

</body>
</html>

<!-- end of page --->

```